



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

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If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***



AUTO SAFETY HOTLINE
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Wash. D.C. Area 366-0123

DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Contract DTNH22-94-D-27058
Case DSI-94-AB-022

 1995

TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CONTRACT NUMBER: DTNH22-94-D-27058
CASE NUMBER: Case DSI-94-AB-022

[REDACTED]

This fatal collision occurred during a winter afternoon [REDACTED] 94 @ 1454) in [REDACTED] California. It was clear and the asphalt roadway was dry and free of defects.

Vehicle 1, a 1992 Chevrolet Corsica driven by a 73 year old female, was travelling at an estimated speed of 45 MPH westbound on a four-lane divided roadway approaching a three-leg intersection. Vehicle 2, a 1990 Mitsubishi Eclipse driven by a 49 year old female, was stopped at the intersection, facing south. After stopping for several seconds while waiting for traffic to clear, the driver of Vehicle 2 pulled into the intersection. The driver of Vehicle 1 saw Vehicle 2 enter the intersection, she braked and steered her vehicle to the left. The front of Vehicle 1 struck the left side of Vehicle 2 in an angle configuration. The airbag in Vehicle 1 deployed at this point. Vehicle 2 was pushed into a counterclockwise direction and came to rest next to Vehicle 1, facing east.

The driver of Vehicle 1 was in full arrest post-collision. She was transported by ambulance with no pulse or respiration. She expired at 1553 hours, less than an hour after the collision. She sustained a laceration of the heart and ascending aorta, a contusion to the pectoralis muscle on the anterior chest wall, a contusion to the epicardium and intraventricular septum, as well as several abrasions to the face, neck, and extremities. The stated cause of death was massive intrathoracic hemorrhage. The fatal injuries were of a compressive-rupture nature and were caused by the driver's proximity to the airbag module during deployment. The driver of Vehicle 2 complained of pain to her right hip.

Both vehicles were towed from the scene due to damage.

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

DYNAMIC SCIENCE, INC.
ACCIDENT INVESTIGATION
CASE NUMBER: DSI-94-AB-022

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ACCIDENT DATA:

Location: [REDACTED], California
Area/Type: Urban
Date/Time: Winter / Afternoon
Accident Type: Car/Car, front to left side

Injury Severity:

Vehicle 1: Driver, AIS-6

Vehicle 2: Driver, complaint of pain

AMBIENCE:

Viewing Conditions: Daylight
Cloud Cover: Clear
Precipitation: None
Road Surface: Dry

ROADWAY:

	VEHICLE 1	VEHICLE 2
Type:	Arterial divided trafficway	Residential divided trafficway
Number of Lanes:	5	2
Width:	25.3 M (83 ft.)	15.5 M (51 ft.)
Traffic Density:	Light	Light
Median:	Raised, curbed 1.2 meters (3.8 ft)	Raised, curbed 2.4 meters (8 ft)
Edge:	Curbed on North, dirt shoulder on South	Curbed
Surface:	Asphalt	Asphalt
Reported Defects:	None	None
Co-efficient of Friction (est.):	0.70	0.70
Vertical Alignment:	Level	4% down grade
Horizontal Alignment:	Slight curve [R = 1,905 m (6,250 ft)]	Straight

TRAFFIC CONTROLS:

	VEHICLE 1	VEHICLE 2
Signals:	None	None
Signs:	None applicable	Stop Sign
Speed Limit:	80 KPH (50 MPH)	40 KPH (25 MPH)
Markings:	Dashed, white lines to left turn lane	None

VEHICLES:

	VEHICLE 1	VEHICLE 2
Description:	1992 Chevrolet Corsica four-door sedan	1990 Mitsubishi Eclipse two-door coupe
Odometer:	15,901 km (9,881 mi.)	Unknown, not inspected
Engine:	3.1 L / 4 cyl.	1.8 L / 4 cyl., per V.I.N.
Vehicle Modifications:	None	None
Tire Condition:	Good	Good (photographs)
Manual Restraints:	Lap and shoulder belts front seating positions, and the left and right rear seating positions; lap belt center rear seating positions.	Lap belts, front seating positions, per V.I.N.
Automatic Restraints:	Supplemental Restraint System (driver's side airbag)	Automatic shoulder belts, per V.I.N.
Reported Defects:	None	None
Cargo:	Unknown	Unknown
Windshield Damage:	None	None (photographs)
Fleet:	No	No
Tow Status:	Towed, due to damage	Towed, due to damage

VEHICLE DAMAGE:

	VEHICLE 1	VEHICLE 2
Object Struck:	V2	V1
Event Number:	01	01
CDC:	12FDEW1	09LPEW2 (photographs)
Maximum Crush:	14 cm (5.6 in.)	Zone 2

VEHICLE VELOCITY ESTIMATES:

	VEHICLE 1	VEHICLE 2
Impact Speed: (estimated)	35 KPH (22 MPH)	8 KPH (5 MPH)
Total Delta V:	11 KPH (7 MPH)	12 KPH (7 MPH)
Longitudinal Delta V:	-11 KPH (-7 MPH)	-2 KPH (-1 MPH)
Lateral Delta V:	-1 KPH (-1 MPH)	+12 KPH (+7 MPH)
Energy Dissipation:	8136.7 joules (5982.9 ft lbs)	5432.1 joules (3928.4 ft lbs)

The following stiffness values were used during the CRASH run: Vehicle 1 (a = 239.3, b = 61.8), Vehicle 2 (a = 180, b = 67).

COLLISION SEQUENCE:

Pre-Crash: Vehicle 1 was travelling westbound on a five lane, divided, two way, urban asphalt trafficway at approximately 76 KPH (47 MPH) in the second (median) lane. Vehicle 2 was stopped at stop sign, facing south. The driver of Vehicle 2 had just left her home and was en route to a supermarket. The driver of Vehicle 1 apparently saw Vehicle 2 enter the travel lane; she braked and steered to the left.

Crash: The front of Vehicle 1 struck the left side of Vehicle 2 in what amounted to an angle configuration at an EDCRASH computed speed of 35 KPH (22 MPH). Vehicle 1 experienced a Delta V of 11 KPH (7 MPH) and 12 KPH (7 MPH) for Vehicle 2. The Delta V was of sufficient magnitude to deploy the Supplemental Restraint System (SRS), driver's side air bag, in Vehicle 1.

Post-Crash: Final rest. Vehicle 1 came to rest partially in its original travel lane and partially in the adjacent lane; it was heading approximately 5 degrees counterclockwise from its pre-crash heading. Vehicle 2 rotated sharply and came to rest facing nearly 90 degrees from its original path of travel.

Driver activities. The driver of Vehicle 1 was sitting in the driver seat and apparently unresponsive. She was removed by ambulance personnel and transported to the hospital where she was pronounced dead on arrival.

The driver of Vehicle 2 was fully alert and aware of her surroundings. She complained of a sore right hip which she attributed to the emergency brake in the center console of her vehicle.

Rescue activities. The driver of Vehicle 1 was removed from the scene by paramedics and transported to a trauma hospital. A chronology of rescue activities is shown in the following table.

Event Time	Event
1454	Collision
1458	Ambulance called
1502	Arrived on scene
1525	Departed from scene
1535	Arrived at hospital
1538	Admitted to hospital
1553	Time of death

Scene clearance. Vehicles 1 and 2 were towed from the scene due to damage.

**Occupant
Kinematics:**

The driver was sitting directly in front of the steering wheel just prior to the collision. Her seat was adjusted to 6.6 cm (2.6 in.) rearward of the forward most position, putting the bottom of the steering wheel rim roughly even with the forward portion of the seat. According to on-scene witnesses, the driver was wearing her lap and shoulder belt. Prior to the collision the driver had her right foot on the brake and her left on the floorboard. Vehicle 1 had apparently been serviced recently since there was a protective paper floor mat in use at the time of the collision. Post-collision, this mat was torn in a manner which would suggest that the driver's foot had come into contact with it.

The driver recognized the impending collision. She braked with her right foot and steered to the left. The pre-impact braking brought the driver forward and nearly into contact with the steering wheel hub.

At impact, the driver appears to have been twisted slightly to the left. At the time of deployment of the air bag, her upper body may possibly have been in contact with the hub, but more likely a short distance back from it. The driver's left knee contacted the lower instrument panel, resulting in a small abrasion. At deployment the module opened in the designed fashion. The upper flap, after initially contacting her chest, rotated vertically upward as designed and contacted her neck and chin, with slightly more contact to the left side than to the right. The lower flap appears to have been restricted somewhat by the proximity of the driver's

upper torso, with the resulting back pressure cracking both the inner (hard plastic) and outer (soft plastic) covers. There is evidence (a clothing transfer) that indicates the driver came into contact with the exterior of the module cover. The concussive force of the deployment was primarily to the left side of the driver's upper body causing a laceration of the heart and the ascending aorta.

The steering column was displaced approximately 3.8 cm (1.5 in.) forward with complete shear capsule separation as a result of the driver's proximity to the module cover during the initiation of the airbag deployment sequence. The airbag contacted the driver's lips during deployment as noted by the red lipstick transfer on the left upper quadrant of the airbag. There were also abrasions to the left side of the driver's face from contact with the expanding airbag.

There is a laceration to the dorsal aspect of the left hand. It appears that the driver was holding onto the rim with both hands and the left one gave way. The deceleration forces, either from braking or the impact, were such that her hand swivelled forward presenting the dorsal portion of her hand to the instrument panel. When her fingers could no longer retain her grip her left hand slipped from the steering wheel rim and struck a switch on the upper part of the left instrument panel.

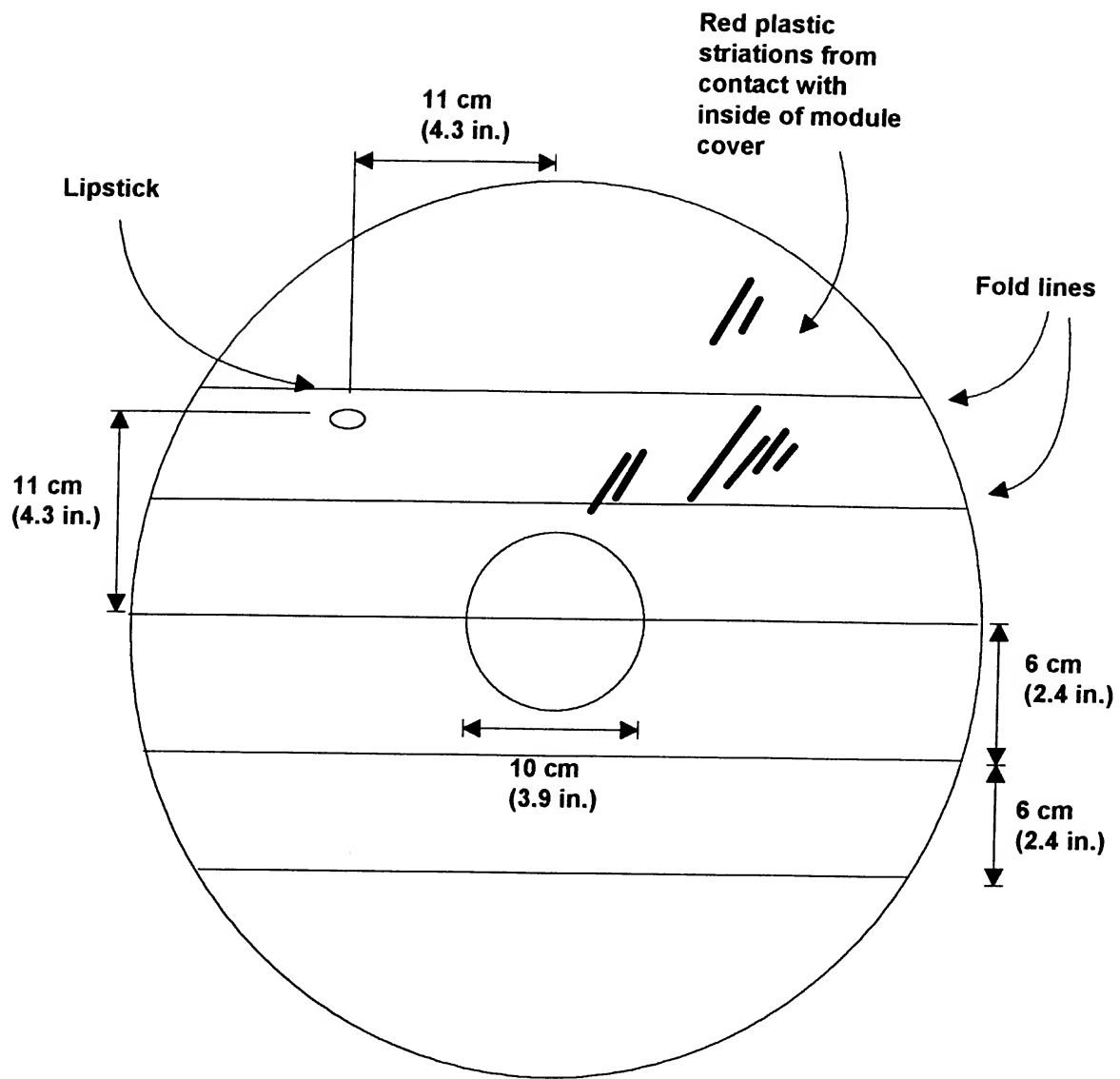
Supplemental

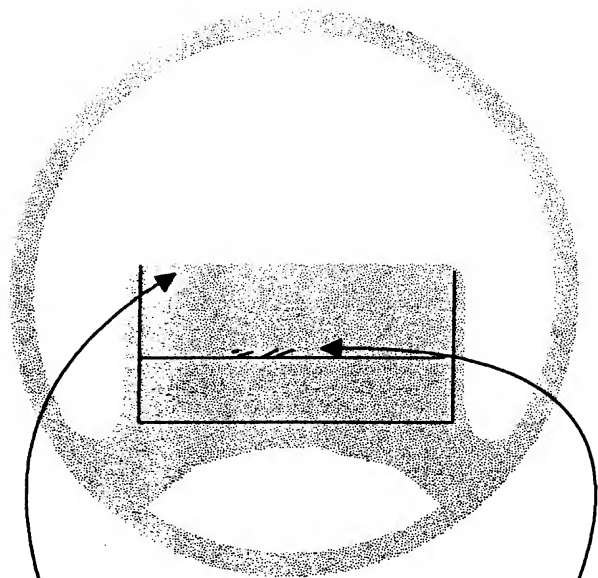
Restraint System:

Vehicle 1 was equipped with a supplement restraint system (driver's side air bag) that deployed as a result of Vehicle 1's frontal impact with the left side of Vehicle 2. The driver's airbag deployed from the module assembly that was contained within the two-spoke steering wheel. The module cover flaps opened in an H-configuration at the designated tear points. The left upper edge of the upper flap broke away as a result of the deployment. There was a cloth transfer on the lower edge of the upper flap. The hard plastic inner liner of the module cover was broken away at the time of inspection. The airbag itself was not damaged. There were red-colored striations in the upper right quadrant of the air bag due to contact with the back side of the module cover. There was a lipstick imprint on the left upper quadrant of the air bag from the driver.

Safety Standards:

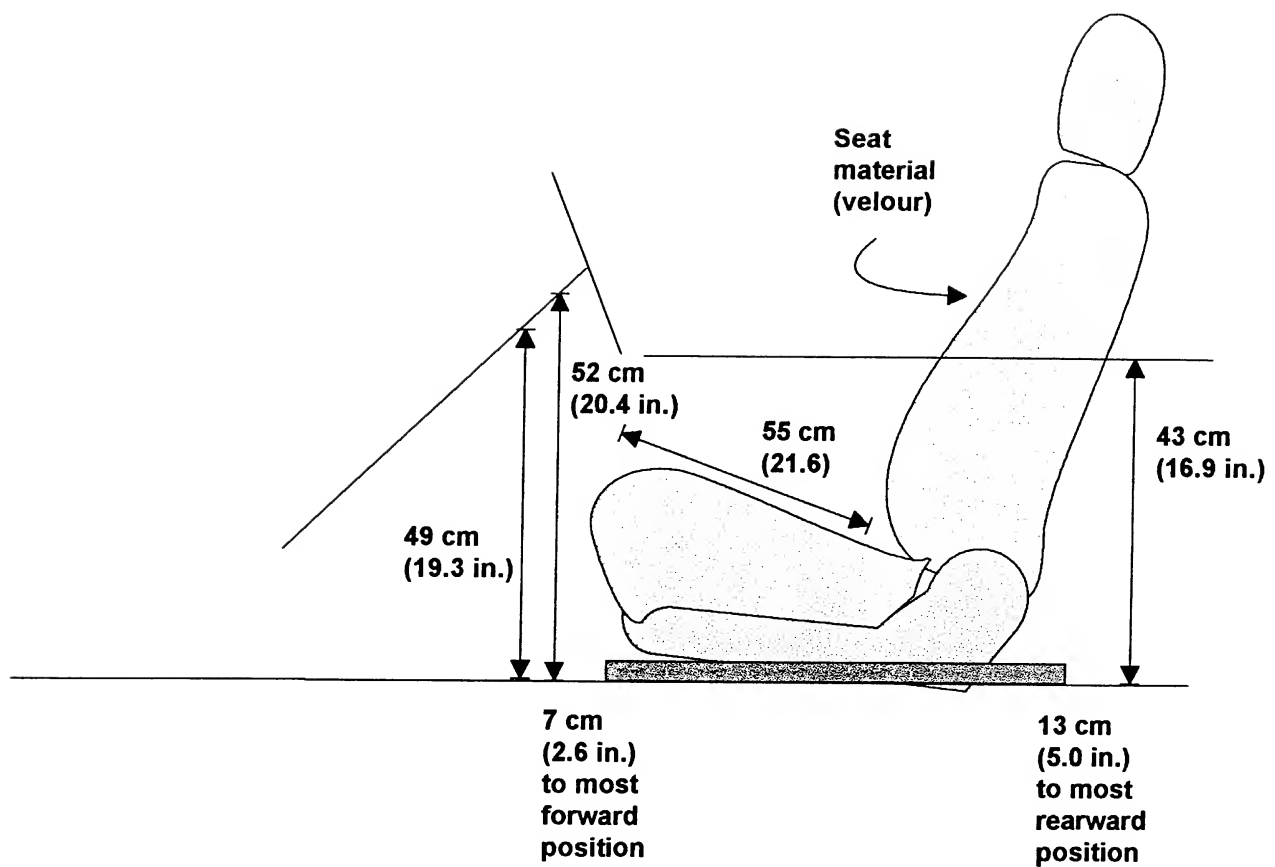
There were no violations of Federal Motor Vehicle Safety Standards and Regulations found during the inspection of Vehicle 1.





module cover torn away

Cloth transfers



DRIVER AND OTHER OCCUPANTS:

VEHICLE 1

DRIVER

Age/Sex:	73 / Female
Seated Position:	Left front
Seat Type:	Bucket
Height:	150 cm (59 in.)
Weight:	58 kg (128 lbs.)
Occupation:	Retired
Pre-existing Medical Condition:	Severe coronary arteriosclerosis and atherosclerotic cardiovascular disease
Alcohol/Drug Involvement:	None
Driving Experience:	Unknown
Body Posture:	Forward from pre-impact braking and possibly leaning somewhat to the right from the left-hand evasive maneuver.
Hand Position:	Both hands on wheel, clock positions not known
Foot Position:	Left on floorboard, right on brake
Restraint Usage:	Supplemental restraint system (driver's side air bag), manual lap and shoulder belt used
Additional Occupants:	None

DRIVER AND OTHER OCCUPANTS (con't):

VEHICLE 2

DRIVER

Age/Sex:	49 / Female
Seated Position:	Left front
Seat Type:	Bucket with folding back
Height:	160 cm (63 in.)
Weight:	50 kg (110 lbs.)
Occupation:	Unknown
Pre-existing Medical Condition:	Unknown
Alcohol Involvement:	None
Driving Experience:	Unknown
Body Posture:	Unknown
Hand Position:	Unknown
Foot Position:	Unknown, presumed to be on accelerator
Restraint Usage:	Automatic shoulder belt , manual lap belt, both used
Additional Occupants:	None

INJURIES:**Vehicle 1**

<u>INJURY</u>	<u>OIC CODE</u>	<u>ICD-9</u>	<u>SOURCE</u>
DRIVER:			
Aorta laceration	420218.6,4	861.03	Airbag module
Heart laceration (multiple)	441016.6,4	861.03	Airbag module
Heart contusion	441002.3,4	861.01	Airbag module
Abrasion, nostril	290202.1,4	910.0	Airbag
Abrasion, left knee	890202.1,2	916.0	Lower instrument panel
Abrasion, left big toe	890202.1,2	917.0	Toe pan
Laceration (2.5 cm), left hand	790600.1,2	882.0	Instrument panel/light switch
Contusion, left hand	790402.1,2	914.0	Instrument panel
Abrasion, left cheek	290202.1,2	910.0	Airbag
Abrasion, left forearm	790202.1,2	913.0	Airbag
Abrasion, chin	290202.1,8	910.0	Module cover
Abrasion, neck	390202.2,5	910.0	Module cover

Statement of medical consultant regarding the mechanism of injuries:

"It appears that this victim died rapidly from exsanguination from cardiac and aortic laceration. These injuries were likely of a compressive-rupture nature rather than a laceration from penetrating rib or sternal ends as there were no fractures to either ribs or sternum. The compression sustained by the aorta and heart could have been secondary to loading from the shoulder component of the belt system, the airbag and its casing, or impact with the steering wheel hub, or all the above.

The weight of evidence, I believe, favors a predominant role for the airbag and casing. There is no evidence of seat belt contusion or abrasion of the skin, and the abrasions to the chin and face and nares are suggestive of contact with the airbag casing and expanding airbag, suggesting victim proximity to the detonating airbag complex. It is not possible to

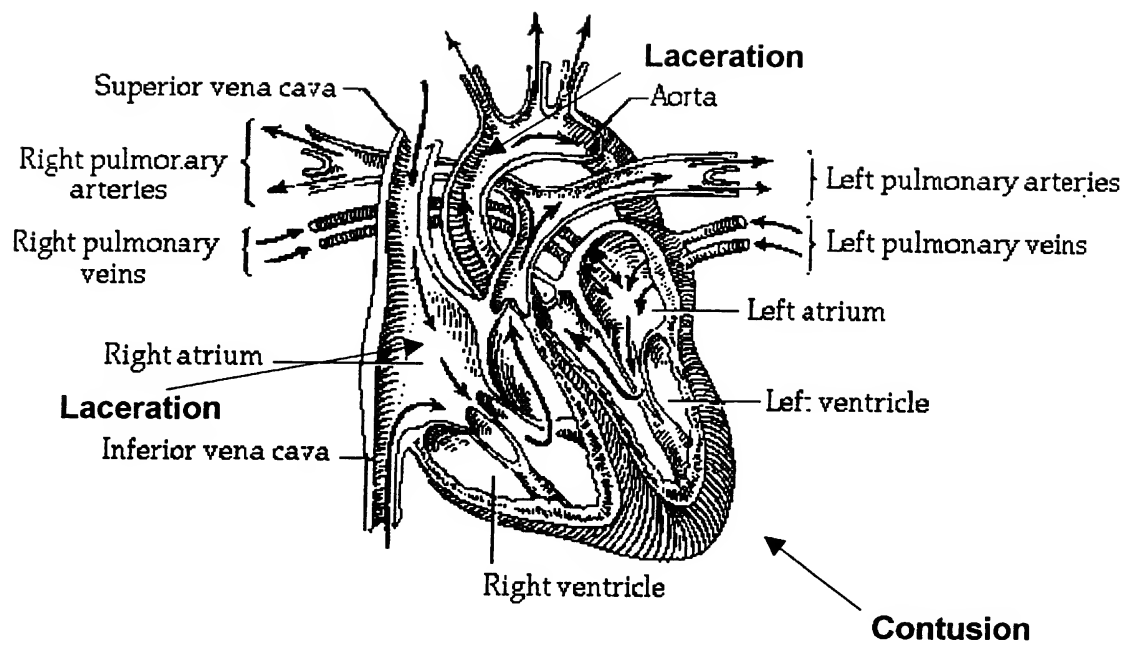
Case Number: DSI-94-AB-022

ascertain whether the thoracic injuries were the result of contact with the airbag module cover or the expanding airbag.

It is unlikely that the pacemaker contributed to her injuries, and while her coronary arteries were seen to be partially occluded, this is a normal finding in victims of this age and not likely to make the heart muscle more susceptible to laceration from external compression."

Vehicle 2

	<u>INJURY</u>	<u>OIC CODE</u>	<u>ICD-9</u>	<u>SOURCE</u>
DRIVER:	No reported injuries			



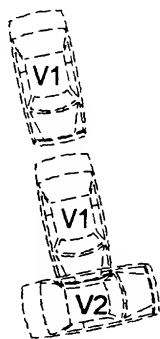
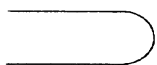
Abbreviations Used In Narrative, Scene And Photographic Documentation

ft	Feet
in	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
IP	Intermediate Point
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound

reference
point
power
line pole



Police
reference
line



Radius
of curve
6250
feet



Stop
sign

r
e
f
e
r
e
n
c
e



roadway edge
not curbed

DSI-94-AB-22

Posted Speed Limit: V1 - 64.4 km/h (40 MPH)

V2 - 48.3 km/h (30 MPH)

Roadway Surface type: Paved Bituminous

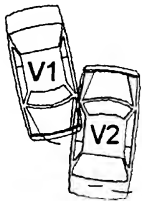
Roadway Grade: V1 level, V2 4 percent down grade



reference
point
power
line pole



Police
reference
line



Stop
sign

r
e
f
e
r
e
n
c
e

Radius
of curve
6250
feet

roadway edge
not curbed

DSI-94-AB-22

Posted Speed Limit: V1 - 64.4 km/h (40 MPH)

V2 - 48.3 km/h (30 MPH)

Roadway Surface type: Paved Bituminous

Roadway Grade: V1 level, V2 4 percent down grade



COLLISION MEASUREMENTS
Case Number DSI-94-AB-022

Reference Point: RP #1 - Power Line Pole, 0.7 meters (2.3 ft) north of curb edge (reference line) and 19.2 meters (63 ft) east of east curb line. RP #2 - Power line pole, 0.7 meters (2.3 ft) north of curb edge (reference line) and 20.3 meters (66.6 ft) west of west curb edge.

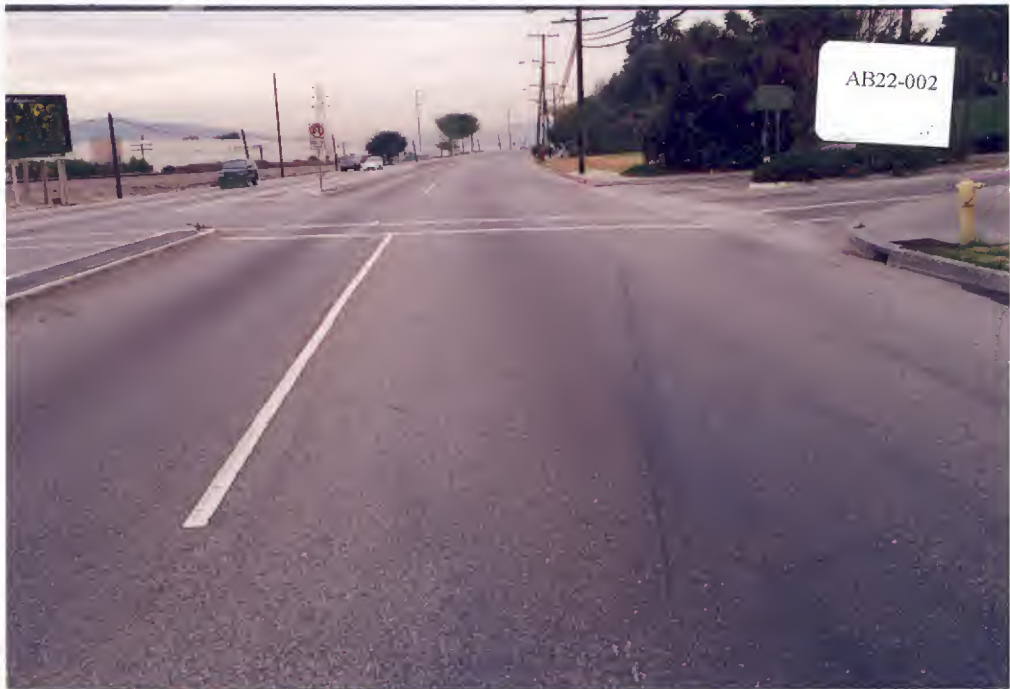
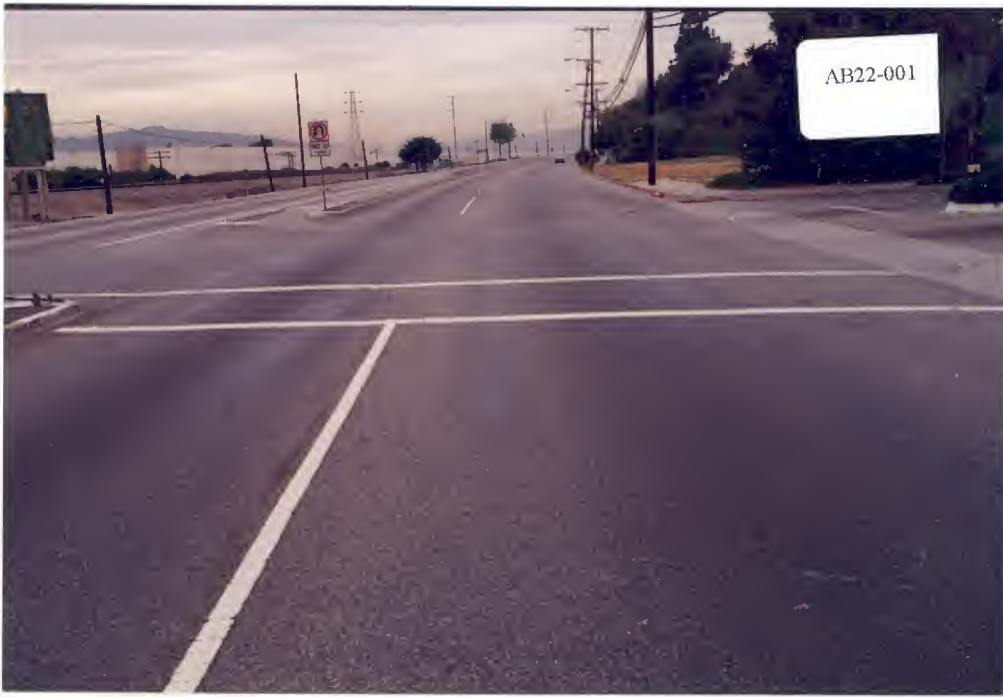
Reference Line: North roadway curb edge

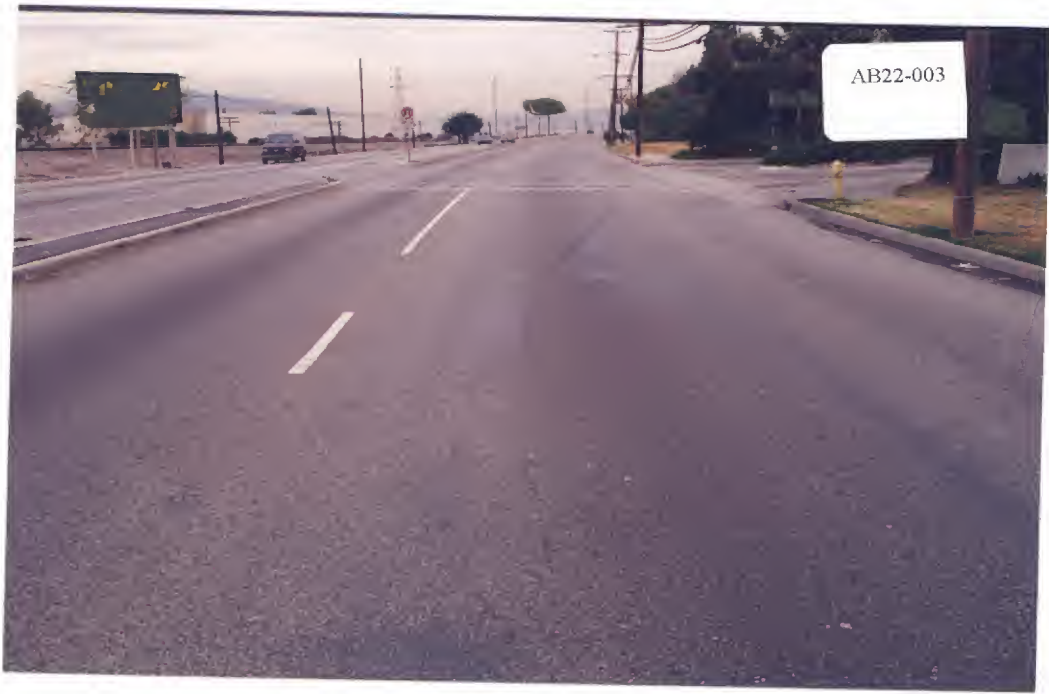
DATA POINT	LONGITUDINALS	LATERALS
Westbound lane widths, North to South (RP #1)		
1 (Vehicle 1 travel lane)	0	S 7.22 m (23.7 ft)
2	0	S 10.92 m (35.8 ft)
Center curbed median	0	S 12.12 m (39.6 ft)
3	0	S 15.22 m (49.7 ft)
4	0	S 19.12 m (62.6 ft)
5	0	S 25.32 m (83.1 ft)
Southbound lane widths - West to East (RP #2)		
1 (Vehicle 2 travel lane)	E 26.9 m (88.3 ft)	0
Center curbed median	E 29.3 m (96.3 ft)	0
2	E 35.5 m (117.6 ft)	0
Roadway scrapes - semi U shaped, #3 (RP #1)		
1 - begin	W 31.5 m (103.5 ft)	S 6.4 m (21.0 ft)
1 - end	W 31.6 m (103.7 ft)	S 6.9 m (22.5 ft)
2 - begin	W 33.2 m (108.9 ft)	S 7.9 m (25.9 ft)
2 - end	W 33.2 m (109.4 ft)	S 8.6 m (28.2 ft)
3 - begin	W 33.3 m (109.4 ft)	S 8.6 m (28.2 ft)
3 - end	W 33.4 m (109.6 ft)	S 9.2 m (30.2 ft)
Radius of curve - east/westbound travel lanes = 1,905 m (6,250 ft)	Vehicle 1 grade = level	Vehicle 2 grade = 4% down

PHOTO / SLIDE INDEX

Case Number DSI-94-AB-022

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-4	1	West	Approach to area of impact
5	1	West	Impact area
6-7	1	East	Looking back along path of travel
8-11	2	South	Approach to area of impact
12	2	South	Area of impact
14	2	North	Looking back along path of travel
14	NA	---	Reference point
15-30	1	CCW	Vehicle exterior
31-57	1	NA	Vehicle interior. Note: #33 shows possible contact on roof rail, #37 shows cracked module cover, #49-50 show instrument panel separation, #52-53 show shear capsule separation.













AB22-013



AB22-014





AB22-017

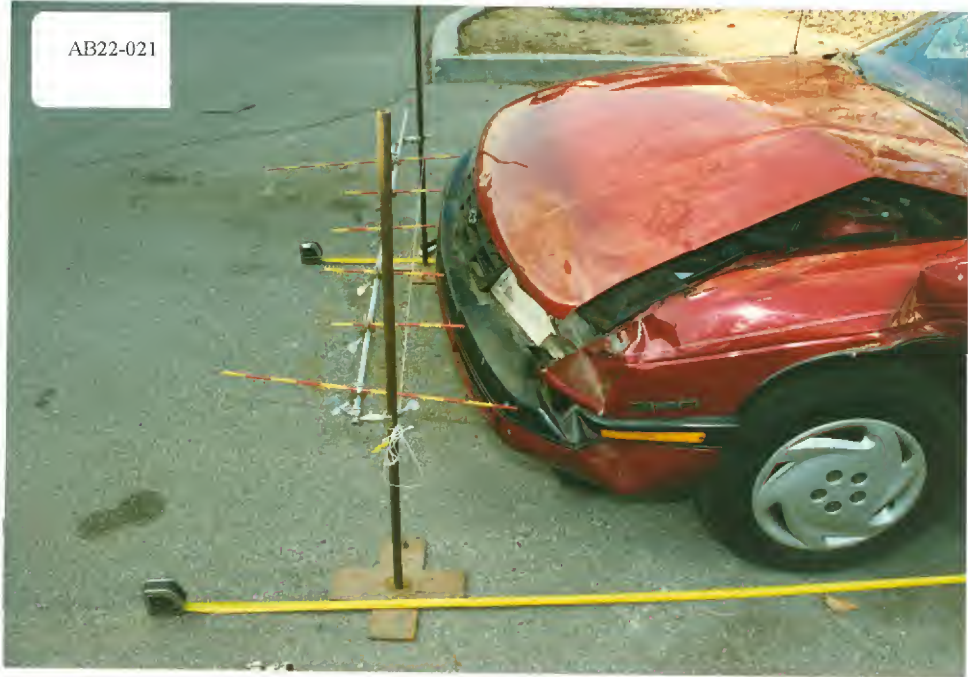


AB22-018

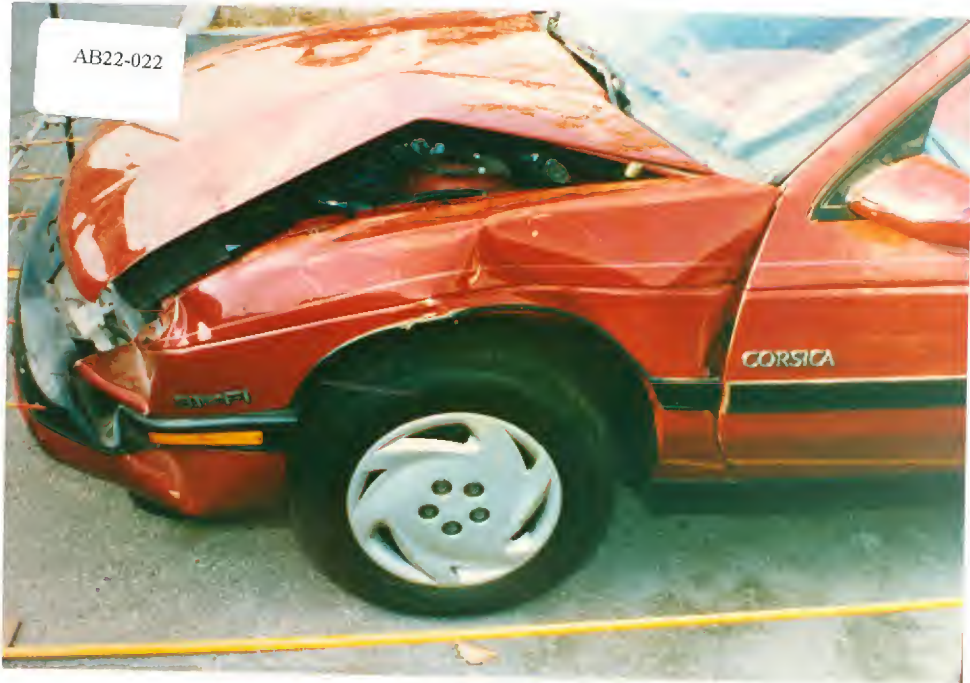




AB22-021



AB22-022

















AB22-037



AB22-038





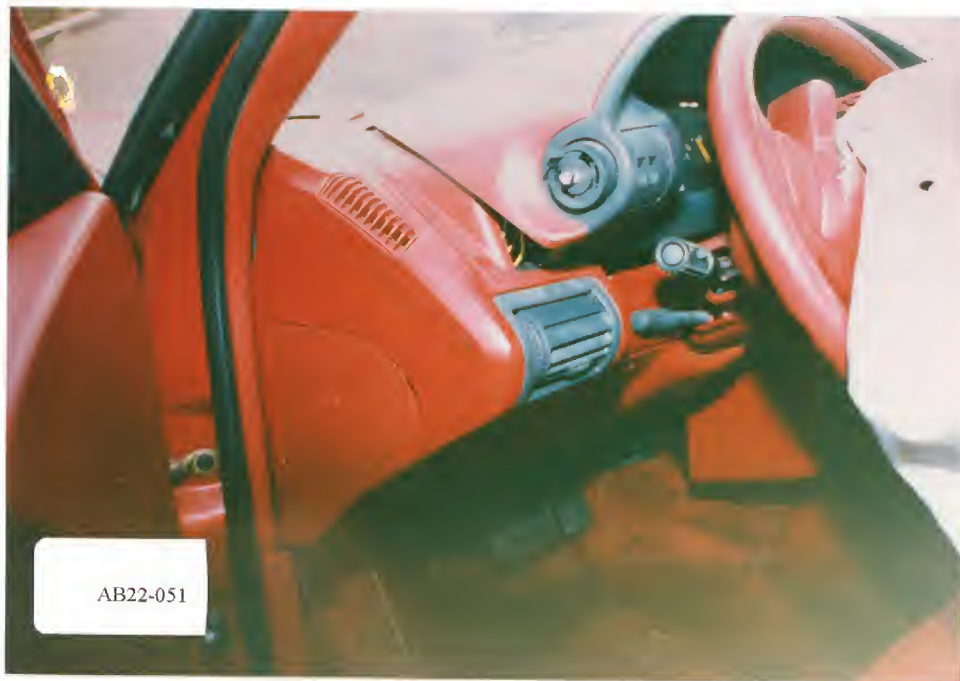




















DS94-22#1



DS84-22#2



DS94-22#3



DS 94-22 #4



DS 84-22 #5



DS94-22 #8



DS94-22#7



DS94-2278



DS94-2279



DS94-22#10



DS94-22#11



DS94-22# 12



DS94-22 #13



DS 94-22 #14
Best Available



DS 94-22 #15
Best Available



DS 94-22 #16
Best Available



DS 94-22 #17
Best Available



DS 94-22 #18
Best Available



DS94-22#19



DS84-22 #20



DS94-22 #21



DS94-22#22



DS 94-22 #23



DS 94-22 #24
Best Available



DS 94-22#25
Best Available



DS 94-22 #26
Best Available



DS 94-22 #27
Best Available



06 94-22 #28
Best Available



DS 94-22 #29



DS 94-22 #30



DS94-22 #31



DS94-22#32



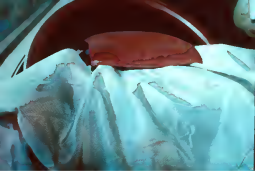
DS 94-22 #33



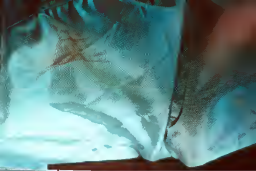
DS94-22#34



DS94-22#35



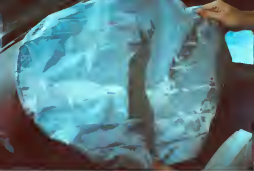
DS94-22#36



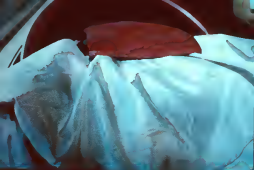
DS 94-22 #37



D5 94-22 #38



DS94-22 #39



DS94-22#40



DS94-22 #41



DS84-22742



DS 94-22 #43



DS94-22 #44



DS94-22 #45



DS94-22846



DS 94-22 #47



DS94-22648



DS 94-22 #19



DS94-22#50



DS94-22 #51



DS 94-22 #52



DS 94-22 #53



DS94-22 #54



DS94-22 #55

POLICE PHOTO INDEX
(Selected photos)
Case No. DSI-94-AB-022

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-4	1/2	East	Final rest of both vehicles. Photo #4 shows closeup of damage to Vehicle 1.
5	1/2	South	Final rest of both vehicles. This photo shows closeup of damage to both vehicles.
6-8	1/2	North	Final rest of both vehicles.
9	1/2	West	Close up view of final rest.
10-11	1/2	South	Final rest of both vehicles.
12-15	1	NA	Interior of vehicle.

AUTOPSY PHOTO INDEX
(Selected views)
Case No. DSI-94-AB-022

PHOTO NO.	SUBJECT MATTER
1	Lower arm abrasion.
2	Contusion to dorsal aspect of left hand.
4	Abrasion to chin and anterior neck, abrasion to left cheek, and abrasion to nares.
4	Closeup view of abrasion to chin and neck area.
5	Overview of victim.
6	View of cardiac injury.

Police
AB20-001



Police
AB20-002



Police
AB20-003



Police
AB20-004



Police
AB20-005



Police
AB20-006



Police
AB20-007



Police
AB20-008



Police
AB20-009



Police
AB20-010



Police
AB20-011



Police
AB20-012



Police
AB20-013



Police
AB20-014



Police
AB20-015



“GRAPHIC” PHOTOGRAPHS AND IMAGES

The following “GRAPHIC” Photographs and Images have been removed from this case.

Autopsy Photo # 1-6

If you would like a copy of these photographs and/or images please write to:

MARJORIE SACCOCCIO
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
55 BROADWAY
CAMBRIDGE, MA 02142

In the body of your request please include the case, photograph and image number(s).

National Highway Traffic Safety
Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

AB 22

IDENTIFICATION

3. Number of General Vehicle
Forms Submitted024. Date of Accident
(Month, Day, Year)WINTER / WEEKDAY1 / 1 / 94

5. Time of Accident

MID AFTERNOON

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that
has been completed; code 1 for the checked special
studies and 0 for the special studies not checked.6. 0 SS15 Administrative Use07. 0 SS16 Pedestrian Crash Data Study08. 0 SS17 Impact Fires09. 0 SS18010. 0 SS190

NUMBER OF EVENTS

11. Number of Recorded Events
in This Accident01Code the number of events which occurred
in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other
involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>02</u>	15. <u>F</u>	16. <u>02</u>	17. <u>01</u>	18. <u>L</u>
19. <u>02</u>	20. <u> </u>	21. <u> </u>	22. <u> </u>	23. <u> </u>	24. <u> </u>	25. <u> </u>
26. <u>03</u>	27. <u> </u>	28. <u> </u>	29. <u> </u>	30. <u> </u>	31. <u> </u>	32. <u> </u>
33. <u>04</u>	34. <u> </u>	35. <u> </u>	36. <u> </u>	37. <u> </u>	38. <u> </u>	39. <u> </u>
40. <u>05</u>	41. <u> </u>	42. <u> </u>	43. <u> </u>	44. <u> </u>	45. <u> </u>	46. <u> </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo area (rear of trailer or straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____

(35) Noncollision injury _____

(38) Other noncollision (specify): _____

(39) Noncollision — details unknown _____

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail) (specify): _____

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): _____

(69) Unknown fixed object _____

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant _____

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify): _____

(89) Unknown nonfixed object _____

(98) Other event (specify): _____

(99) Unknown event or object _____

National Highway Traffic Safety
Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

0 1

VEHICLE IDENTIFICATION

4. Vehicle Model Year

9 2Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

2 0CHEVROLETApplicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

0 1 9CORSICAApplicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type

0 4Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

1 6 1 L T 5 3 T 9 N Y
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

1(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

9 9 9Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown mph X 1.6093 = kph

11. Police Reported Alcohol Presence

9(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) UnknownNote: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

9 6Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) UnknownSource: PAR

ACCIDENT RELATED

13. Speed Limit

0 8 0(000) No statutory limit
Code posted or statutory speed limit
in kph
(999) Unknown50 mph X 1.6093 = 0 8 0 kph

14. Attempted Avoidance Maneuver

0 8(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type

8 3Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):

- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify):
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
(0) Driver not present
(1) Driver present
(9) Unknown
17. Number of Occupants This Vehicle 0 1
(00-96) Code actual number of occupants
for this vehicle
(97) 97 or more
(99) Unknown
18. Number of Occupant Forms Submitted 0 1

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1 1 8 0
Code weight to nearest
10 kilograms.
(045) Less than 450 kilograms
(610) 6,100 kilograms or more
(999) Unknown
2,609 lbs X .4536 = 1,183 kgs
Source: [REDACTED]

20. Vehicle Cargo Weight 0 4 0
Code weight to nearest
10 kilograms.
(000) Less than 5 kilograms
(450) 4,500 kilograms or more
(999) Unknown
____ lbs X .4536 = ____ kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown
22. Documentation of Trajectory Data
for This Vehicle 1
(0) No
(1) Yes
23. Post Collision Condition of Tree or Pole
(For Highest Delta V) 0
(0) Not collision (for highest delta V) with
tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted <45 degrees
(4) Tilted ≥45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):
(9) Unknown

24. Rollover 0
(0) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
(1) Rollover, 1 quarter turn only
(2) Rollover, 2 quarter turns
(3) Rollover, 3 quarter turns
(4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily
about the lateral axis)
(9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0
(0) No override/underride, or
not an end-to-end impact
Override (see specific CDC)
(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

- Underride (see specific CDC)*
(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override
(9) Unknown

HEADING ANGLE AT IMPACT FOR
HIGHEST DELTA V

Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle 2 6 5
28. Heading Angle For Other Vehicle 1 7 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	20 STOPPED 21, 22, 23	22 SLOWER 24, 25, 27	26 DECEL. 28, 30, 31	29 30, 31	(EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	34 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	38 AVOID COLLISION WITH VEH.	40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	44 45, 46, 47	45 46, 47	46 47	47 48	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN
III. Same Trafficway Opposite Direction	G. Head-On	50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	54 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	58 AVOID COLLISION WITH VEH.	60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	68 69 INITIAL OPPOSITE DIRECTIONS	71 70 INITIAL SAME DIRECTIONS	73 72	(EACH • 74) SPECIFICS OTHER (EACH • 75) SPECIFICS UNKNOWN	
	K. Turn Into Path	77 76	79 78 TURN INTO SAME DIRECTION	81 80 TURN INTO OPPOSITE DIRECTIONS	83 82	(EACH • 84) SPECIFICS OTHER (EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	87 86	88 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest)

2*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

Highest

32. Lateral Component of Delta V 0 0 0 11 9 Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(999) Unknown

33. Energy Absorption

0 0 8 1 0 05982 9 8136 7 Nearest 100 joules (highest)

Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

COMPUTER GENERATED DELTA V

30. Total Delta V

Highest

0 1 17.0 MPH11.2

Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of
Delta V0 0 1 17.6 MPH11.2

Nearest kph (highest)

Nearest kph (secondary)

(NOTE: 000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [☒] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 9

- (0) No other drug(s) present
- (1) Yes [other drug(s) present]
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 1

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____

- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION

OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>φ</u>	41. <u>1</u>
Depressant Drug	42. <u>φ</u>	43. <u>1</u>
Stimulant Drug	44. <u>φ</u>	45. <u>1</u>
Hallucinogen Drug	46. <u>φ</u>	47. <u>1</u>
Cannabinoid Drug	48. <u>φ</u>	49. <u>1</u>
Phencyclidine (PCP)	50. <u>φ</u>	51. <u>1</u>
Inhalant Drug	52. <u>φ</u>	53. <u>1</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>φ</u>	55. <u>1</u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object

- (98) Other event (specify): _____

- (99) Unknown event or object

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 5

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify):
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify:
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

PRECRASH DATA (Continued)

65. Critical Precrash Event

1 7*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): _____

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Manuever

2

- (0) No avoidance manuever
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____

(8) No driver present

(9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Manuever (Corrective Action)

1

- (0) No avoidance manuever
- (1) Vehicle stayed in travel lane where avoidance manuever was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance manuever was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance manuever was initiated
- (4) Vehicle departed roadway
- (5) Avoidance manuever initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

A B Z Z

φ 1

VEHICLE IDENTIFICATION

VIN 1 G 1 L T 5 3 T 9 N Y

Model Year 9 Z

Vehicle Make (specify): CHEVROLET

Vehicle Model (specify): CORSICA

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	LF BUMPER CORNER	

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	± D
		Width (CDC)	Max Crush								
1	BUMPER	52.7	9.6	51.5	9.6	5.1	3.1	2.4	2.75	5.3	
	- FREE SPACE		-4.φ		-4.φ	-1.75	-1.2	-1.2	-1.75	-4.φ	
			5.6		5.6	3.35	2.9	2.2	1.φ	1.3	φ
1	BUMPER	134	14	131	14	9	7	φ	3	3	φ

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

a. Rotation physically restricted b. Tire deflated

RF 2
LF 1
RR 2
LR 2

RF 2
LF 2
RR 2
LR 2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase (103.5) 263 cm
Overall Length (183.5) 466 cm
Maximum Width (68.1) 173 cm
Curb Weight (2609) 1186 kg
Average Track _____ cm
Front Overhang (37.8) 96 cm
Rear Overhang (40.9) 104 cm
Undeformed End Width (53) 135 cm
Engine Size: cyl./displ. 3.1 L

WHEEL STEER ANGLES
(For locked front wheels or displaced rear axles only)

RF \pm +2-3 °
LF \pm +2-3 °
RR \pm _____ °
LR \pm _____ °

Within \pm 5 degrees

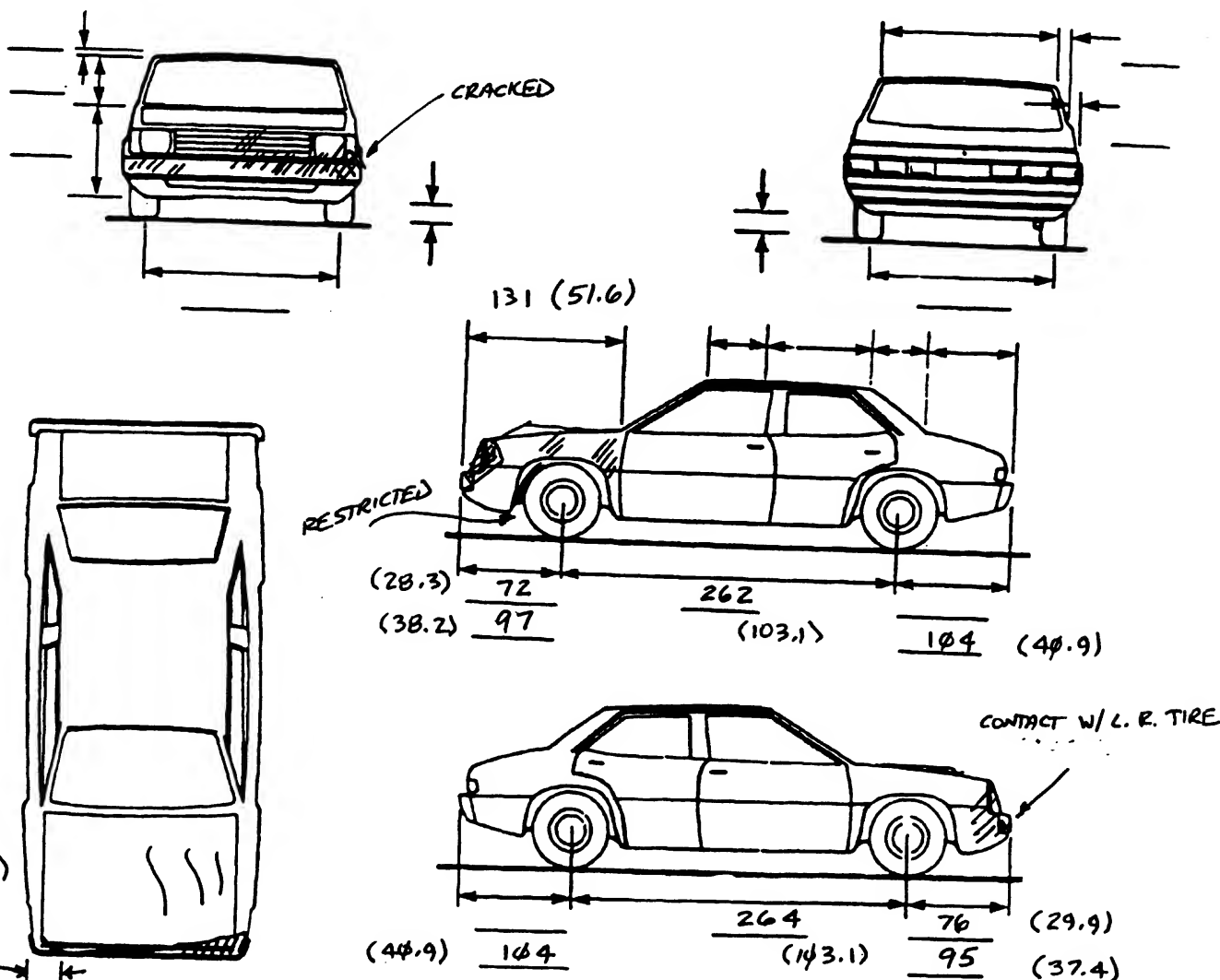
DRIVE WHEELS

☒ FWD ☐ RWD ☐ 4WD

Approximate Cargo Weight NONE
VISIBLE kg

ABS

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OBJECT CONTACTED

(99) Unknown event or object

[illegible]

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>φ 1</u>	5. <u>φ 2</u>	6. <u>1 2</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>φ 1</u>

Second Highest Delta "V"

12. <u> </u>	13. <u> </u>	14. <u> </u>	15. <u> </u>	16. <u> </u>	17. <u> </u>	18. <u> </u>	19. <u> </u>
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>± D</u>
<u>1 3 5</u>	<u>φ 1 4</u>	<u>φ φ 9</u>	<u>φ φ 7</u>	<u>φ φ 6</u>	<u>φ φ 3</u>	<u>φ φ 3</u>	<u>+ - φ φ φ</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>± D</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>+ -</u>

26. Are CDCs Documented but Not Coded on The Automated File? φ
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 2 6 3
Code to the nearest centimeter
(999) Unknown

1 φ 3 . 5 inches X 2.54 = 2 6 3 centimeters

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

φ

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

φ

(0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

31. Origin of Fire

φ

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____
(9) Unknown

32. Type of Fuel Tank-1

1

33. Type of Fuel Tank-2

φ

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

34. Fuel Tank-1 Location

1

35. Fuel Tank-2 Location

φ

- (0) No fuel tank
(1) Aft of center of the rear wheels (rear axle)
centered
(2) Aft of center of the rear wheels (rear axle) left
side
(3) Aft of center of the rear wheels (rear axle)
right side
(4) Forward of center of the rear wheels (rear
axle) centered
(5) Forward of center of the rear wheels (rear
axle) left side
(6) Forward of center of the rear wheels (rear
axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

36. Fuel Tank-1 Filler Cap Location

3

37. Fuel Tank-2 Filler Cap Location

φ

- (0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on
left side plane
(3) Aft of center of the rear wheels (rear axle) on
right side plane
(4) Forward of center of the rear wheels (rear
axle) on left side plane
(5) Forward of center of the rear wheels (rear
axle) on right side plane
(6) Over the center of the rear wheels (rear axle)
on left side plane
(7) Over the center of the rear wheels (rear axle)
on right side plane
(8) Other (specify): _____
(9) Unknown

38. Fuel Tank-1 Damage

1

39. Fuel Tank-2 Damage

φ

- (0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle Form

Page 6

40. Location of Fuel System-1 Leakage

1

41. Location of Fuel System-2 Leakage

φ

(0) No fuel tank

(1) No fuel leakage

Primary Area Of Leakage

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify):

(9) Unknown

42. Fuel Type-1

φ 1

43. Fuel Type-2

φ φ*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify):

Electric Powered or Electric/Solar Powered Vehicles

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify):

(98) Other Hybrid (specify):

(99) Unknown fuel type

44. Is This Vehicle Equipped With More Than Two Fuel Tanks?

φ

(0) No (one or two tanks only)

Yes - More Than Two Tanks(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank

Tank location

Filler cap location

Tank damage

Location of leakage

Type of fuel

(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
 (I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

National Highway Traffic Safety
Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

φ 1

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

φ φ

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H φ

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch
Opening in Collision. If IV05-IV09 ≠ 2, Then code 010. LF φ 11. RF φ 12. LR φ 13. RR φ 14. TG/H φ

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS φ 16. LF φ 17. RF φ 18. LR φ 19. RR φ20. BL φ 21. Roof φ 22. Other φ

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS φ 24. LF φ 25. RF φ 26. LR φ 27. RR φ28. BL φ 29. Roof φ 30. Other φ

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant
contact and not holed by occupant contact(5) Glazing out-of-place by occupant contact and holed by
occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No
Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS φ 32. LF φ 33. RF φ 34. LR φ 35. RR φ36. BL φ 37. Roof φ 38. Other φ

(0) No glazing contact and no damage, or no glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted

(4) AS-14 — Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS φ 40. LF φ 41. RF φ 42. LR φ 43. RR φ44. BL φ 45. Roof φ 46. Other φ

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

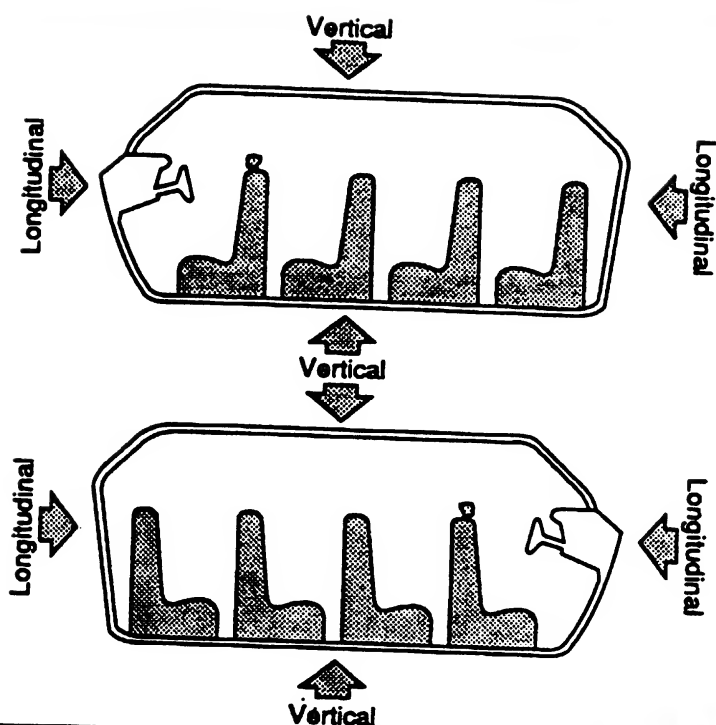
(3) Partially opened

(4) Fully opened

(9) Unknown

Note: Sketch intruded areas

Note: Sketch intruded areas



Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat
 (11) Left
 (12) Middle
 (13) Right

Second Seat
 (21) Left
 (22) Middle
 (23) Right

Third Seat
 (31) Left
 (32) Middle
 (33) Right

Fourth Seat
 (41) Left
 (42) Middle
 (43) Right

(97) Catastrophic
 (98) Other enclosed area (specify) _____

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
Ø	—	Ø	=	Ø
	—		=	
/	—	/	=	/

STEERING COLUMN87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-94 CDS.

X X

89. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-94 CDS.

X X X

90. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-94 CDS.

X X X

91. Blank

(This variable is left blank
 so that numbering consistency
 can be maintained with the
 1988-94 CDS.

X X X

92. Steering Rim/Spoke Deformation

Code actual measured
 deformation to the nearest centimeter

- (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

0 0

93. Location of Steering Rim/Spoke Deformation

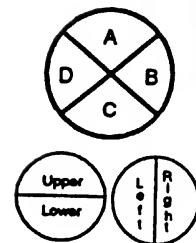
Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

Half Sections

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke

- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

**INSTRUMENT PANEL**

94. Odometer Reading

0 1 6,000

_____ kilometers—Code to the
 nearest 1,000 kilometers

- (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown

009,001 miles X 1.6093 = 015,901 kilometers

Source: VEH. INSPECTION

95. Instrument Panel Damage from Occupant Contact?

- (0) No
 (1) Yes
 (9) Unknown

1

96. Knee Bolsters Deformed from Occupant Contact?

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

0

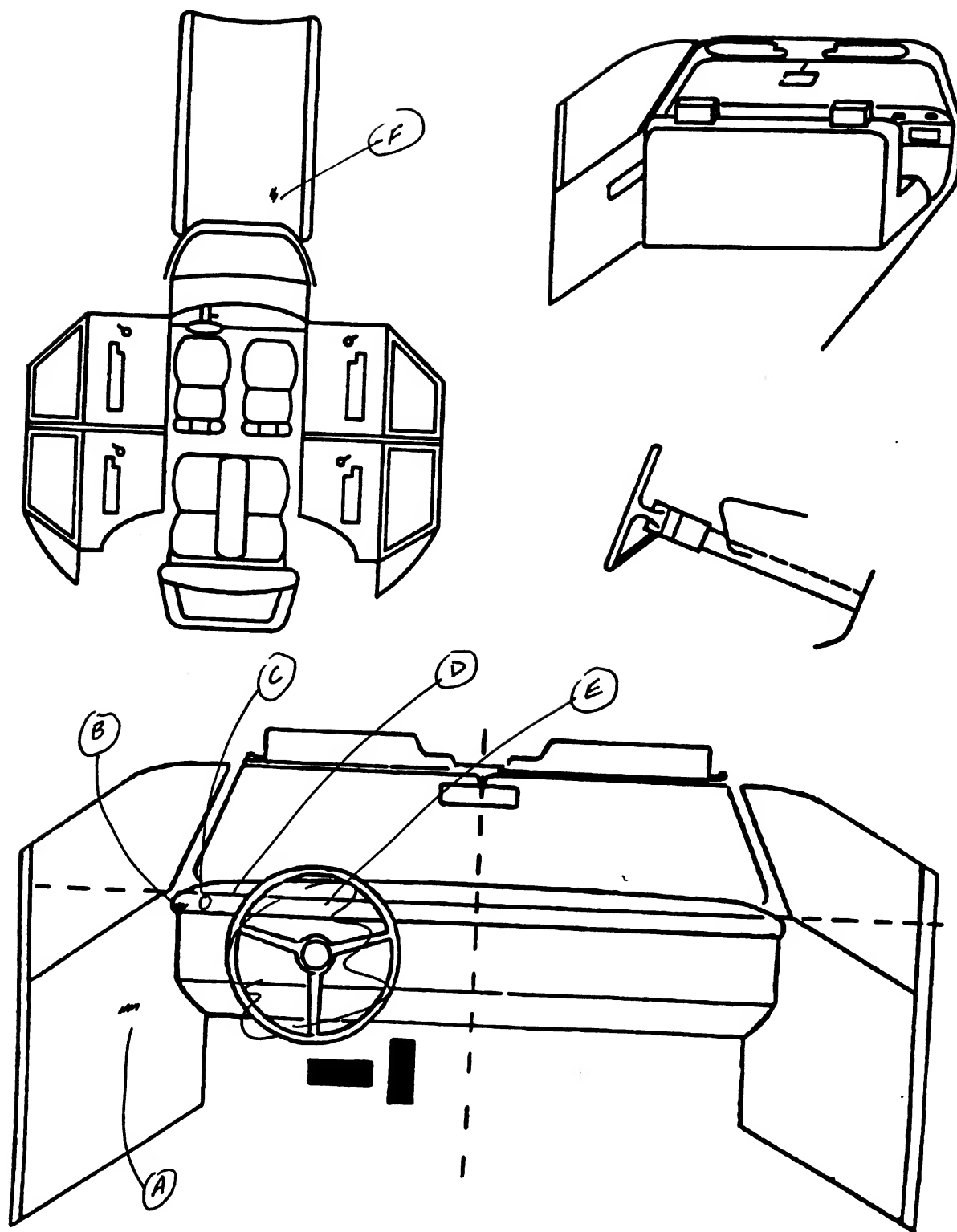
97. Did Glove Compartment Door Open During Collision(s)?

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

0

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).
 Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
 Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	21	01	-	SCUFF	3
B	09	01	L. HAND?	SCUFF	3
C	09	01	L. HAND?	SWITCH OFF	3
D	09	01	-	SPEEDOMETER CRACKED/ENTIRE PANEL SHIFTED	2
E	45	01	FACE	LIPSTICK	1
F	54	01?	-	SMALL SCUFF	3
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar

- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A (A1/A2)-pillar

- (33) Right B-pillar

- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): _____

- (44) Head restraint system

- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): _____

- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
F I R S T	Availability/Function		
	Deployment		
	Failure	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
- (1) Air bag

Non-functional

- (2) Air bag disconnected (specify): _____
- (3) Air bag not reinstalled
- (9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

Are There Indications of Air Bag System Failure?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): RESTRICTED DEPLOYMENT
- (9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	/	/
	Use	/	/
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4		4
	Evidence of usage	04		04
	Used in this crash?	YES		NO
	Proper Use	YES 1		NA
	Failure Modes	1		
SECOND	Availability	4	3	4
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used - type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat - type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model						

Specify Below for Each Child Safety Seat

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3		3
	Seat Type	41		41
	Seat Performance	1		1
	Seat Orientation	1		1
SECOND	Head Restraint Type/Damage	4	4	4
	Seat Type	43	43	43
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify):

(9) Unknown

Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):

(10) Box mounted seat (i.e., van type)

(99) Unknown

Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [☒] Yes []

Describe entrapment mechanism:

Component(s):

(Note in vehicle interior diagram)



OCCUPANT ASSESSMENT FORM

OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B 2 2

3. Vehicle Number

0 1

4. Occupant Number

0 1

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

7 3

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

1 5 0Code actual height to the nearest
centimeter.

(999) Unknown

59 inches X 2.54 = 1 5 0 centimeters

8. Occupant's Weight

0 5 0Code actual weight to the nearest
kilogram.

(999) Unknown

1 2 0 pounds X .4536 = 0 5 0 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

1 1

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front
of seat

(8) Other abnormal posture (specify):

(9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position)

41

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

(10) Box mounted seat (i.e., van type)

(99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation φ φ

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage φ φ32. Child Safety Seat Shield Usage φ φ33. Child Safety Seat Tether Usage φ φNote: Options below applicable to
Variables OA31-OA33.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 0 0

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 9 7

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 0 1

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0 141. 2nd Medically Reported Cause of Death 0 242. 3rd Medically Reported Cause of Death 0 3

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 1 2

- Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/ Function** φ

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use φ

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____

- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type φ

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System φ

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident φ

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other automatic belt failure (specify): _____

- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

- (9) Unknown

Check the Primary Source Used In Determining Belt Use.

- [] Not equipped/not available/destroyed or rendered inoperative
- [] Vehicle inspection
- [] Official injury data
- [] Driver/occupant interview
- [] Other (specify): _____

- [] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [] YES ☒

UPDATE CANDIDATE?

NO ☒ YES []

STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**BELT USE DETERMINATION****TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 9 7
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

51. Was the Occupant Given Blood? 9
(1) No - blood not given
(2) Yes - blood given
(specify units): _____
(9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 9 7
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported, HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

53. Primary Source of Belt Use Determination B
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify): WITNESSES
(9) Unknown if belt used



U.S. Department of Transportation
National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

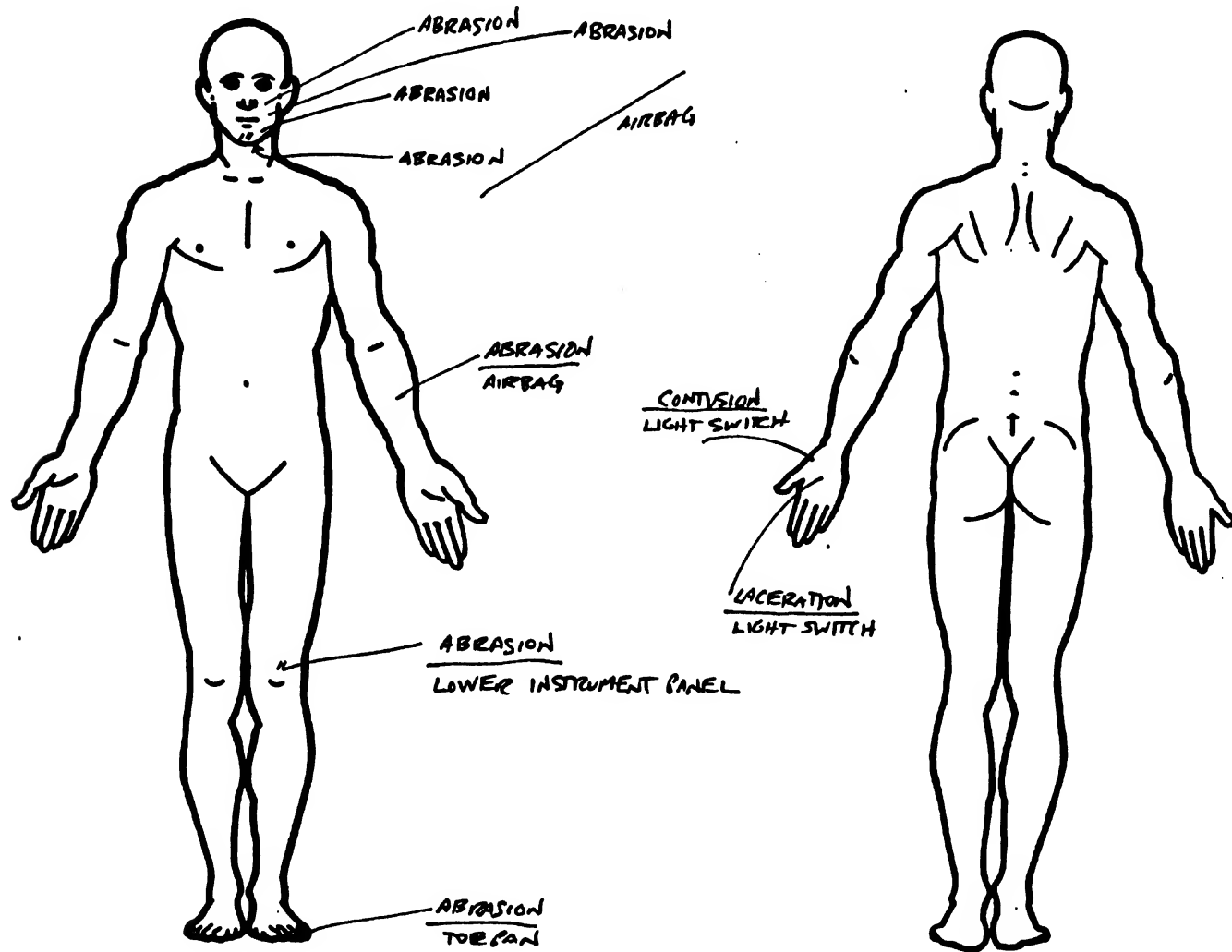
	Source of Injury Data	O.I.C.-A.I.S						Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
1st	5. <u>1</u>	6. <u>4</u>	7. <u>2</u>	8. <u>02</u>	9. <u>18</u>	10. <u>6</u>	11. <u>4</u>	12. <u>16</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>1</u>	17. <u>4</u>	18. <u>4</u>	19. <u>10</u>	20. <u>16</u>	21. <u>6</u>	22. <u>4</u>	23. <u>16</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>1</u>	28. <u>4</u>	29. <u>4</u>	30. <u>10</u>	31. <u>02</u>	32. <u>3</u>	33. <u>4</u>	34. <u>16</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>1</u>	39. <u>2</u>	40. <u>9</u>	41. <u>02</u>	42. <u>02</u>	43. <u>1</u>	44. <u>4</u>	45. <u>45</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>1</u>	50. <u>0</u>	51. <u>9</u>	52. <u>02</u>	53. <u>02</u>	54. <u>1</u>	55. <u>2</u>	56. <u>09</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>1</u>	61. <u>0</u>	62. <u>9</u>	63. <u>02</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>56</u>	68. <u>2</u>	69. <u>1</u>	70. <u>00</u>
7th	71. <u>1</u>	72. <u>7</u>	73. <u>9</u>	74. <u>06</u>	75. <u>00</u>	76. <u>1</u>	77. <u>2</u>	78. <u>09</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>1</u>	83. <u>7</u>	84. <u>9</u>	85. <u>04</u>	86. <u>02</u>	87. <u>1</u>	88. <u>2</u>	89. <u>09</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
9th	93. <u>1</u>	94. <u>2</u>	95. <u>9</u>	96. <u>02</u>	97. <u>02</u>	98. <u>1</u>	99. <u>2</u>	100. <u>45</u>	101. <u>1</u>	102. <u>1</u>	103. <u>00</u>
10th	104. <u>1</u>	105. <u>7</u>	106. <u>9</u>	107. <u>02</u>	108. <u>02</u>	109. <u>1</u>	110. <u>2</u>	111. <u>45</u>	112. <u>1</u>	113. <u>1</u>	114. <u>00</u>

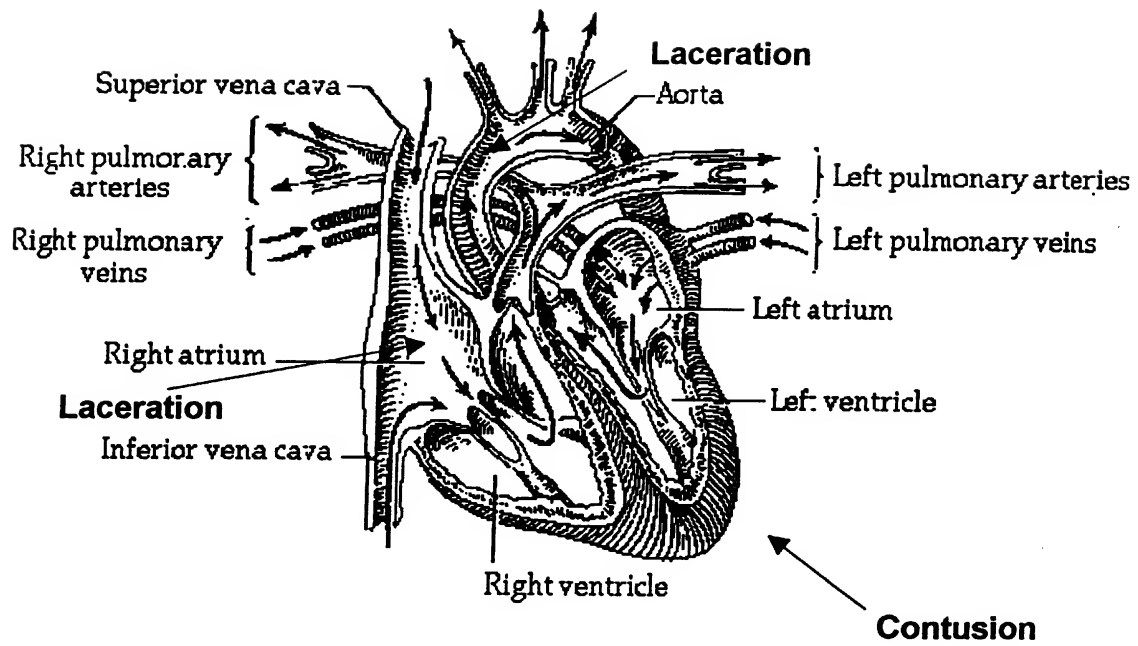
OCCUPANT INJURY DATA

[illegible]

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

___ No

___ Yes

Blood Alcohol
Level (mg/dl)

BAL = ___

Glasgow Coma
Scale Score

GCSS = ___

Units of Blood
Given

Units = ___

Arterial Blood
Gases

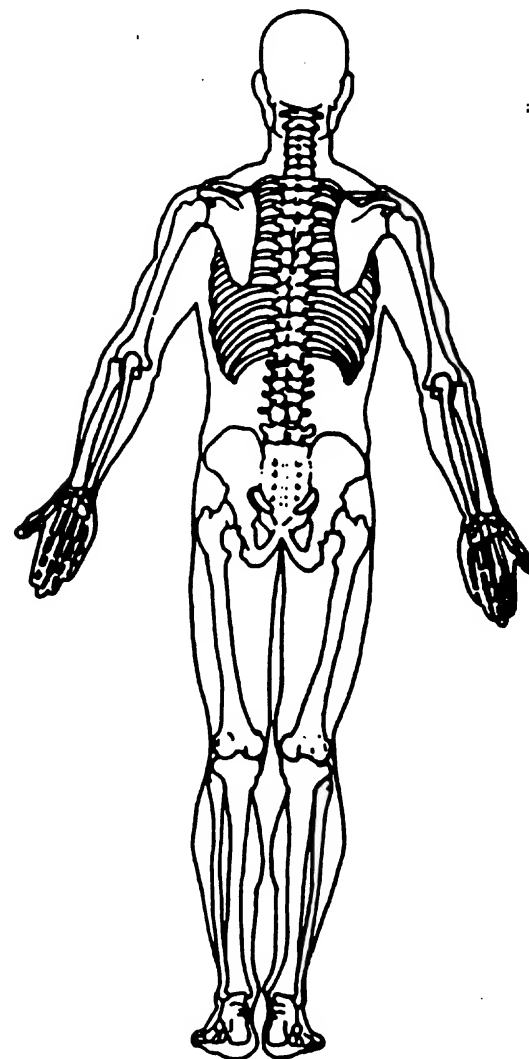
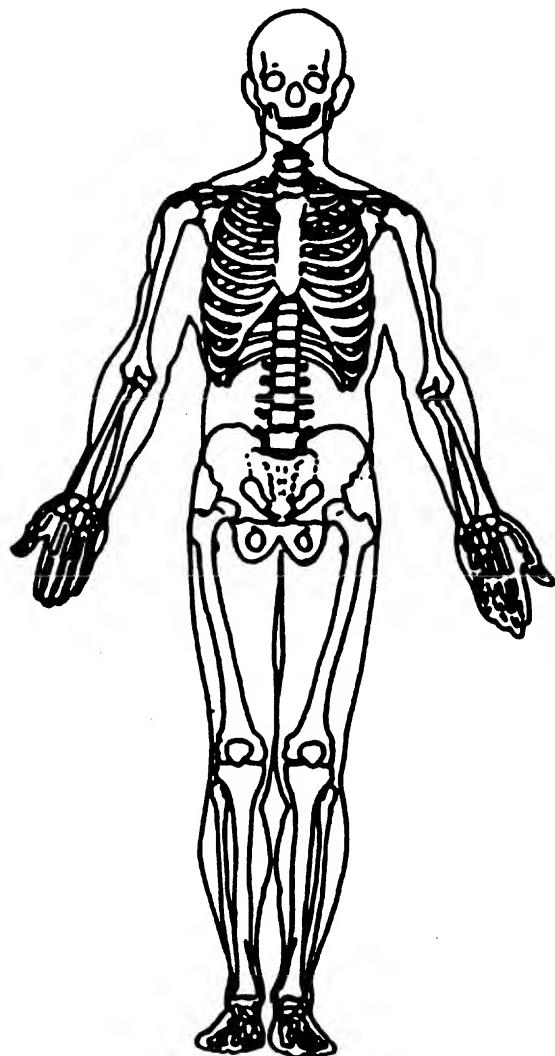
pH = ___

PO₂ = ___

PCO₂ = ___

HCO₃ = ___

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): _____
- (19) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): _____

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (55) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tree (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Specific Anatomic Structure

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NPS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerve, Organs, Bones

Joint are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NPS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NPS as to lesion or severity.

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

A B Z Z

3. Vehicle Number

0 2

VEHICLE IDENTIFICATION

4. Vehicle Model Year

9 0

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

MITSUBISHI

5 2

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

ECLIPSE

0 3 7

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type

0 3

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

1

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

9 9 9

Code to the nearest kph (NOTE: 000 means
less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown

___ mph X 1.6093 = ___ kph

11. Police Reported Alcohol Presence

0

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) UnknownNote: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

9 6

Code actual value (decimal implied
before first digit—0.xx)(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit

0 4 0

(000) No statutory limit

Code posted or statutory speed limit
in kph

(999) Unknown

25 mph X 1.6093 = 0 4 0 kph

14. Attempted Avoidance Maneuver

0 1

(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type

8 2

Applicable codes may be found on the
back of page two of this field form(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,500$ kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,500$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,500$ kgs GVWR)
- (24) Van based school bus ($\leq 4,500$ kgs GVWR)
- (25) Van based other bus ($\leq 4,500$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,500$ kgs GVWR)

- (60) Step van ($> 4,500$ kgs GVWR)
- (61) Single unit straight truck ($4,500$ kgs $<$ GVWR $\leq 8,850$ kgs)
- (62) Single unit straight truck ($8,850$ kgs $<$ GVWR $\leq 12,000$ kgs)
- (63) Single unit straight truck ($> 12,000$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify):
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 4 1
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 4 1

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1 1 5 0
 Code weight to nearest 10 kilograms.
 (045) Less than 450 kilograms
 (610) 6,100 kilograms or more
 (999) Unknown
2,524 lbs X .4536 = 1,145 kgs
 Source:
20. Vehicle Cargo Weight 9 9 9 0
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (450) 4,500 kilograms or more
 (999) Unknown
 lbs X .4536 = kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit 4
 (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 1
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 4
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted < 45 degrees
 (4) Tilted ≥ 45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):
 (9) Unknown

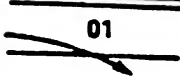

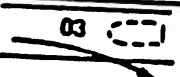
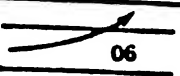
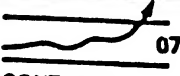
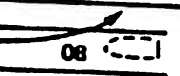
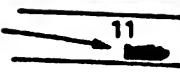


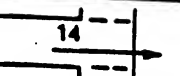
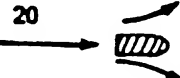
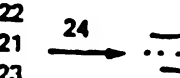
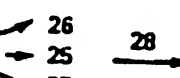
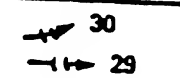

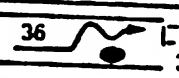

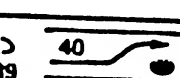
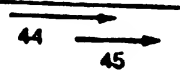
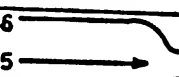

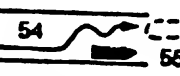
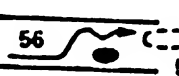

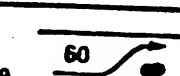



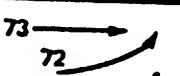
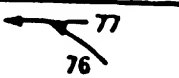
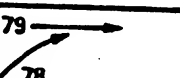
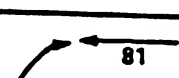

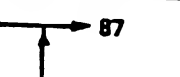
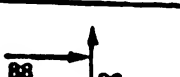
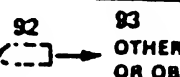
24. Rollover 4
 (0) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify):
 (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 4
26. Rear Override/Underride (this Vehicle) 4
 (0) No override/underride, or not an end-to-end impact
Override (see specific CDC)
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):
Underride (see specific CDC)
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):
 (7) Medium/heavy truck or bus override
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown
27. Heading Angle For This Vehicle 1 7 5
28. Heading Angle For Other Vehicle 2 6 5

Category	Configuration	ACCIDENT TYPES (Includes Intent)					
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 21 23 SLOWER 24, 25, 26	 24 25 26 27 DECEL. 28, 29, 30	 26 27 28 29 30 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47	(EACH • 48) SPECIFICS OTHER		(EACH • 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	51 (EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN			
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	65 (EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN			
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 72	(EACH • 74) SPECIFICS OTHER		(EACH • 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 77 76 TURN INTO SAME DIRECTION	 79 78 TURN INTO OPPOSITE DIRECTIONS	 81 80	 83 82	(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	(EACH • 90) SPECIFICS OTHER		(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact			

29. Basis for Total Delta V (highest)

2*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Highest

0 1 21.3 11.7 Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: 000 means less than
0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of Delta V

+ 0 0 0 21.3 2.09 Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(__999) Unknown

32. Lateral Component of Delta V

Highest

⊕ - 4 1 2+1.2 11.6 Nearest kph (highest)

____ Nearest kph (secondary)

(NOTE: __000 means greater than
-0.5 kph and less than +0.5 kph)
(± 160) ± 159.5 kph and above
(__999) Unknown

33. Energy Absorption

4 0 5 3 0 03928.4 5342.6 Nearest 100 joules (highest)

____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program Results (For Highest Delta V)

1

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

2

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):
PHOTOS ONLY

36. Is this an AOPS Vehicle?

3

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence φ

- (0) No other drug(s) present
- (1) Yes [other drug(s) present]
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver φ

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver φ

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION**OTHER DRUGS TEST RESULTS FOR DRIVER**

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u> φ </u>	41. <u> φ </u>
Depressant Drug	42. <u> φ </u>	43. <u> φ </u>
Stimulant Drug	44. <u> φ </u>	45. <u> φ </u>
Hallucinogen Drug	46. <u> φ </u>	47. <u> φ </u>
Cannabinoid Drug	48. <u> φ </u>	49. <u> φ </u>
Phencyclidine (PCP)	50. <u> φ </u>	51. <u> φ </u>
Inhalant Drug	52. <u> φ </u>	53. <u> φ </u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u> φ </u>	55. <u> φ </u>

Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object _____

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object _____

- (98) Other event (specify): _____

- (99) Unknown event or object _____

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Fire truck or car
 (8) Other (specify):
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

0 0

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

0

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll

0

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

1 0

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

PRECRASH DATA (Continued)

65. Critical Precrash Event

15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): _____

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver φ

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) φ

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



U.S. Department of Transportation
National Highway Traffic Safety
Administration

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

CRASHPC PROGRAM SUMMARY

Identifying Title

Primary
Sampling Unit

Case No. - Stratum

Accident Event
Sequence No.

Date (month, day, year) of Run

CRASHPC Vehicle Identification

Vehicle	Year	Make	Model	NASS Veh. No.
Vehicle 1	1992	CHEVROLET	CORSICA	1
Vehicle 2	1990	MITSUBISHI	ECLIPSE	2

GENERAL INFORMATION

VEHICLE 1				VEHICLE 2			
Size				Size			
Weight	2609	135	2744	Weight	2524	110	2634
	Curb	Occupant(s)	Cargo		Curb	Occupant(s)	Cargo
CDC	1	2	F D E W 1	CDC	0	9	L P E W 1
PDOF	a = 239.3 b = 61.0 g = 463.2			PDOF	a = 140 b = 67 g = 148		
Stiffness	9			Stiffness	2		

SCENE INFORMATION

Rest and Impact Positions [] No. Go To Damage Information [] Yes

VEHICLE 1				VEHICLE 2			
Rest Position	(4.5)			Rest Position	12.2		
X	5.5			X	5.4		
Y	0.4			Y	-87.4		
PSI	77			PSI	5.0		
Impact Position	4.4			Impact Position	-14.5		
X	(-20)			X	-8.4		
Y	-22			Y			
PSI	05.4			PSI			
Slip Angle				Slip Angle			

VEHICLE MOTION

Sustained Contact [] No [] Yes

VEHICLE 1				VEHICLE 2			
Skidding	[] No	[] Yes		Skidding	[] No	[] Yes	
Skidding Stop Before Rest	[] No	[] Yes		Skidding Stop Before Rest	[] No	[] Yes	
End-of-Skidding Position				End-of-Skidding Position			
X				X			
Y				Y			
PSI				PSI			
Curved Path	[] No	[] Yes		Curved Path	[] No	[] Yes	
Point on Path				Point on Path			
X				X			
Y				Y			
Rotation Direction	[] None	[] CW	[] CCW	Rotation Direction	[] None	[] CW	[] CCW
Rotation > 360°	[] No	[] Yes		Rotation > 360°	[] No	[] Yes	

National Accident Sampling System – Crashworthiness Data System: CrashPC Program Summary

FRICTION INFORMATION

Coefficient of Friction

Rolling Resistance Option

Vehicle 1 Rolling Resistance

LF _____

RF _____

LR _____

RR _____

Vehicle 2 Rolling Resistance

LF _____

RF _____

LR _____

RR _____

TRAJECTORY INFORMATION

Trajectory Data [] No [] Yes

If No, Go To Damage Information

Vehicle 1 Steer Angles

LF _____

RF _____

LR _____

RR _____

Vehicle 2 Steer Angles

LF _____

RF _____

LR _____

RR _____

Terrain Boundary [] No [] Yes

First Point

X _____

Y _____

Second Point

X _____

Y _____

Secondary Friction Coefficient

DAMAGE INFORMATION

VEHICLE 1

Damage Length

_____ 53 . _____

Crush Depths

C1 _____ 5 6

C2 _____ 3 . 3 5

C3 _____ 2 . 9

C4 _____ 2 . 2

C5 _____ 1 . 4

C6 _____ 1 . 3

Damage Offset

± _____ 4 . 4

VEHICLE 2

Damage Length

_____ . _____

Crush Depths

C1 _____

C2 _____

C3 _____

C4 _____

C5 _____

C6 _____

Damage Offset

± _____

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

SUMMARY OF EDCRASH RESULTS

Lic. User: NHTSA #7

S/N: 0266-7

Version: 4.61

Date: [REDACTED]-1995

AB22

MESSAGES:

WARNING: The Damage-based DELTA-V(s) differ from the Momentum-based DELTA-V(s) by more than 10 percent. Review the Speed Changes displayed on the SUMMARY OF RESULTS.

If the user-entered scene data (particularly the angles at impact and the positions at impact and rest) are correct, then the user-entered PDOF's or Damage Data may be suspect. The difference may also be the result of bumper over-ride and the default or user-entered crush stiffness coefficients are too high. Review and adjust the damage data as required.

WARNING: The Damage-based estimates for damage energy grossly violate the conservation of energy. Review the output to determine the required corrections to the Damage Data or Scene Data.

The energy absorbed by damage (impact) should be approximately equal, whether calculated from Vehicle Damage or Damage & Scene Data. The results are shown below:

Combined Crush Energy:

Damage Data	9911.2 ft-lb
Damage and Scene Data	11875.0 ft-lb
Linear Momentum	22435.9 ft-lb

Damage-based Velocities:

Veh #1	18.8 mph
Veh #2	5.9 mph

WARNING: The separation velocity of the striking vehicle is greater than the separation velocity of the struck vehicle along a line between the vehicle CGs. This implies the striking vehicle is driving through the struck vehicle after impact.

The coefficient of restitution should be positive (this result is displayed in the RELATIVE VELOCITY DATA results which follow). This generally means the separation velocity of the striking vehicle should be less than the separation velocity of the struck vehicle. Check your entered rolling resistances and scene data to make the required modifications.

B22

-1995 Page 2

IMPACT SPEED (TRAJECTORY AND CONSERVATION OF LINEAR MOMENTUM)

	TOTAL	FWD.	LAT.	SIDESLIP
VEH #1	21.8 mph	21.8 mph	0.0 mph	0.0 deg
VEH #2	5.2 mph	5.2 mph	0.0 mph	0.0 deg

SPEED CHANGE (DAMAGE)

	TOTAL	FWD.	LAT.	PDOF
VEH #1	7.0 mph	-7.0 mph	-0.9 mph	7.3 deg
VEH #2	7.3 mph	-1.3 mph	7.2 mph	-79.7 deg

SPEED CHANGE (LINEAR MOMENTUM)

	TOTAL	FWD.	LAT.	PDOF
VEH #1	10.1 mph	-10.0 mph	-1.0 mph	5.5 deg
VEH #2	10.5 mph	-1.5 mph	10.4 mph	-81.5 deg

ENERGY DISSIPATED BY DAMAGE

VEH #1	5982.9 ft-lb
VEH #2	3928.4 ft-lb

RELATIVE VELOCITY DATA

SPEED ALONG LINE THRU CGS (LINEAR MOMENTUM)

VEH #1	21.6 mph
VEH #2	-0.3 mph

SPEED ORTHOGONAL TO CG LINE (LINEAR MOMENTUM)

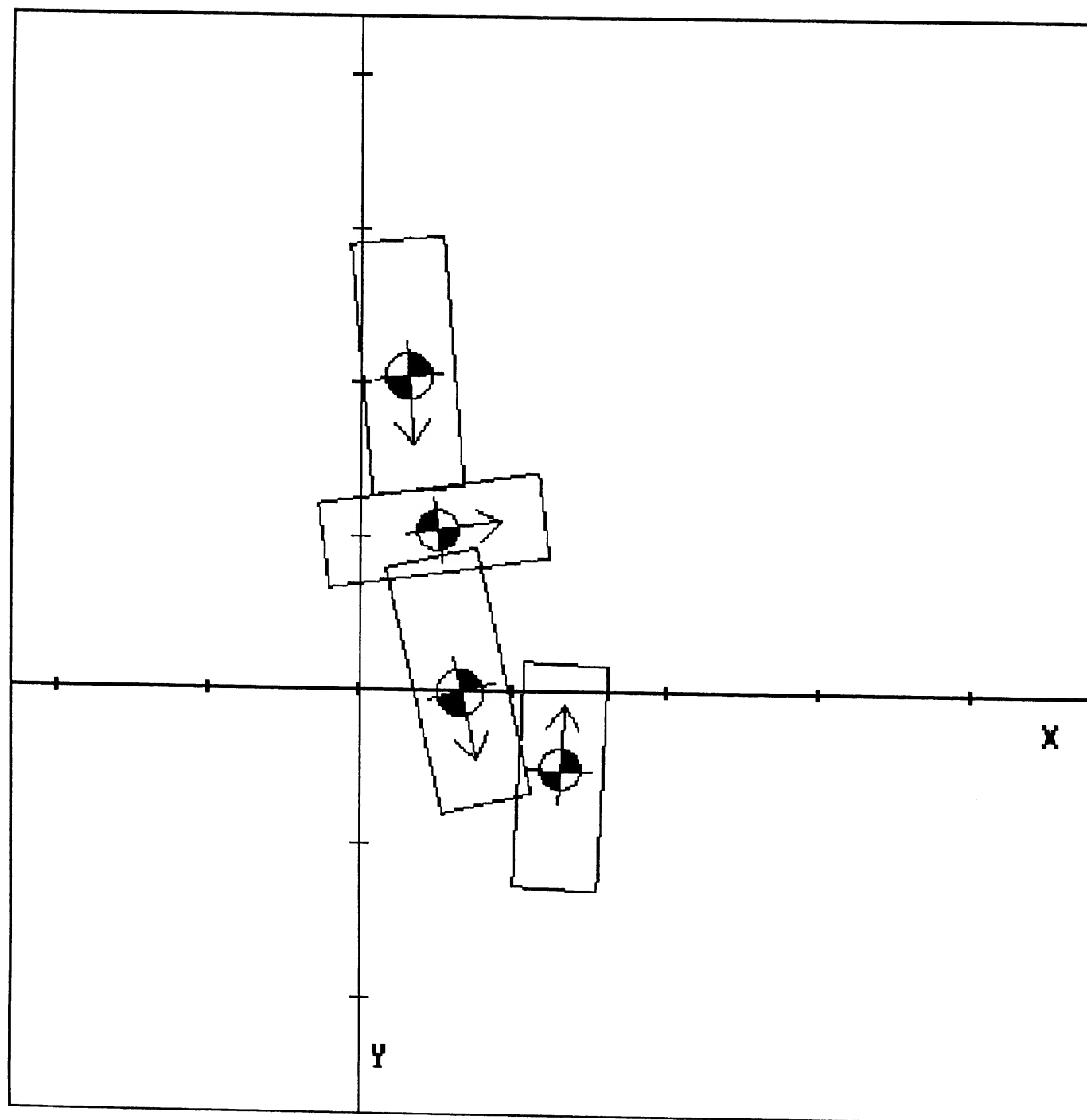
VEH #1	2.4 mph
VEH #2	5.2 mph

CLOSING VELOCITY (LINEAR MOMENTUM)

21.3 mph

COEFFICIENT OF RESTITUTION (LINEAR MOMENTUM)

-0.058



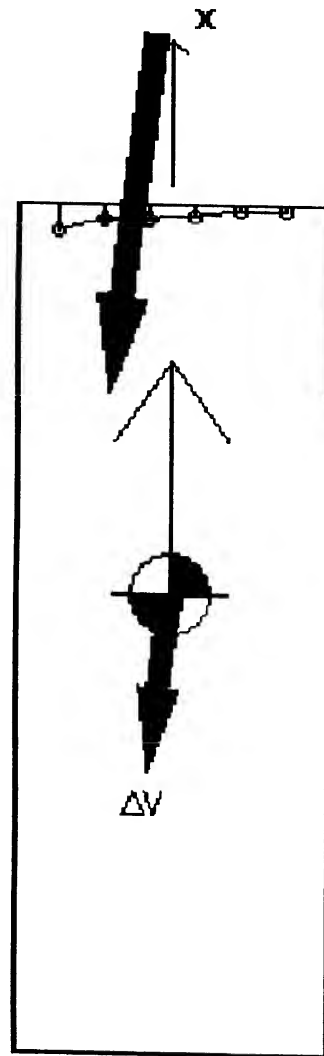
EDCRASH
Site Drawing

	Ueh #1	Ueh #2
Impact		
Speed	21.8	5.2
X	3.0	5.0
Y	-20.5	-10.5
Psi	85.0	-8.0
Rest		
X	6.5	13.0
Y	0.0	5.0
Psi	77.0	-87.0

UNITS: mph,ft,deg

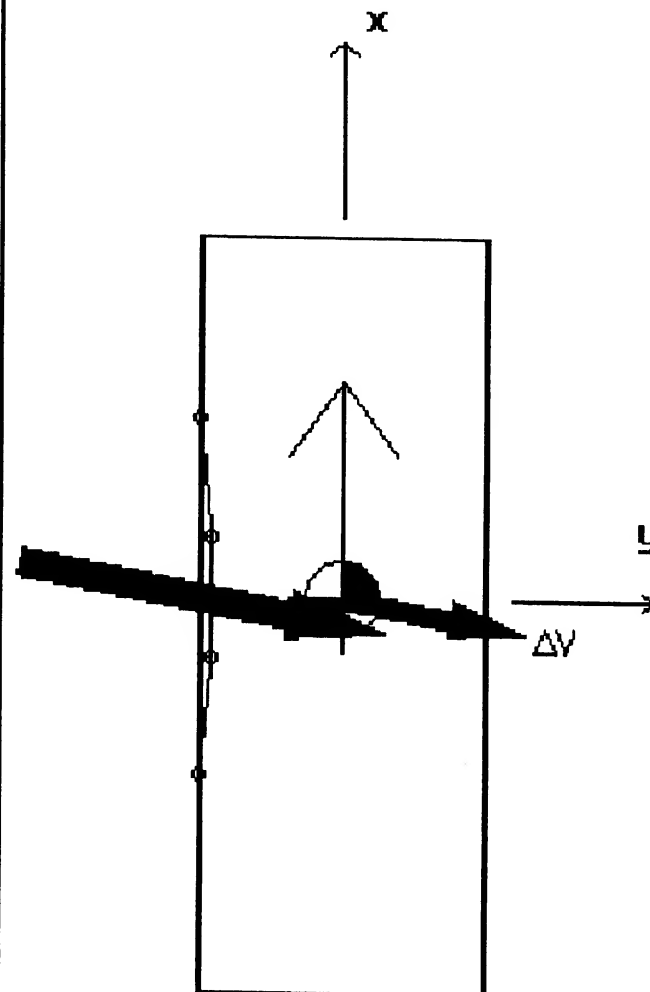
Scale: 10.0 ft/in

Vehicle No. 1

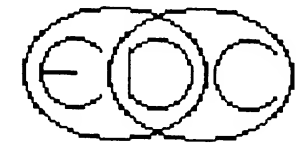


CDC/PDOF: 12fdew1 7.3 deg
Max Impact Force: 21306 lb

Vehicle No. 2



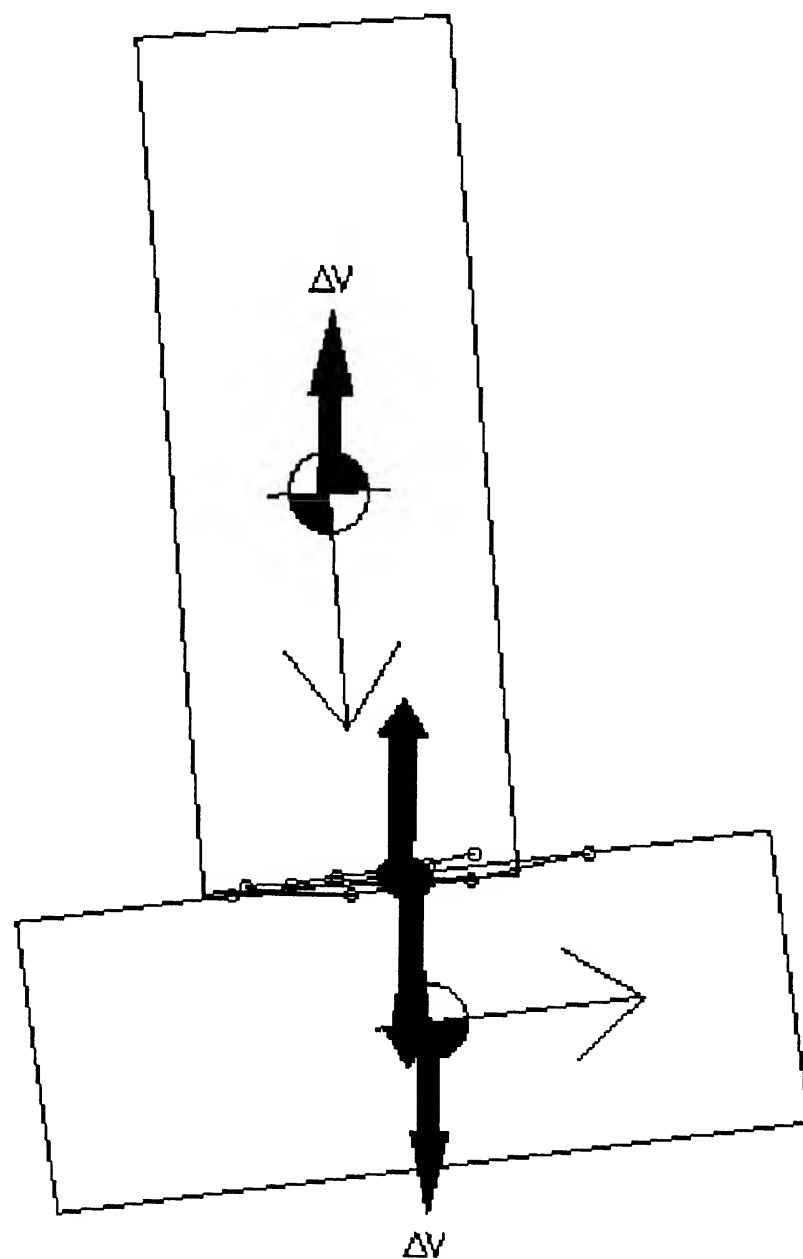
CDC/PDOF: 091pew1 -79.7 deg
Max Impact Force: 22251 lb



EDCRASH Damage Profiles

	Veh #1	Veh #2
Delta-U (mph):		
X	-7.0	-1.3
Y	-0.9	7.2
Tot	7.0	7.3

Crush Data (in):		
W	53.0	83.0
D	0.0	0.0
C1	5.6	0.0
C2	3.4	2.8
C3	2.9	2.8
C4	2.2	0.0
C5	1.0	
C6	1.3	



EDCRASH
At Impact

	Ueh #1	Ueh #2
Velocities (mph)		
Tot	21.8	5.2
Fwd	21.8	5.2
Lat	0.0	0.0
Beta	0.0	0.0

Delta-V (mph)		
(BASIS: Momentum)		
X	-10.0	-1.5
Y	-1.0	10.4
Tot	10.1	10.5
PDOF	5.5	-81.5

UNITS: mph,ft,deg

AIRBAG SUPPLEMENT

1

ACCIDENT SUMMARY

1. Accident Date: WINTER/ WEEKDAY
2. Police Investigated 1
(1) Yes
(2) No
(3) Unknown

Agency:
City:
County:
3. General Locality 2
(1) Freeway, Limited Access
(2) Urban (City)
(3) Urban-Rural (mixed)
(4) Rural, Fields
4. Configuration (First Harm) 4
(0) Struck Object or Ped
(1) Rear-End
(2) Head-On
(3) Rear-to-Rear
(4) Angle
(5) Sideswipe-Same Direction
(6) Sideswipe-Opposite Dir.
(7) Noncollision
(8) Nonimpact Deployment
(9) Unknown
5. Fire Involved 0
(0) None
(1) Airbag Vehicle
(2) Other Vehicle
(3) Both Vehicles
(9) Unknown
6. Vehicles Involved 1
7. Persons Involved 1
8. Injured Persons 1
9. Maximum AIS in Accident 6
10. Date Vehicle Inspected: 94
11. Reason Vehicle Not Inspected 1
(0) Not Required
(1) Inspection Completed
(2) Cannot be Located
(3) Repaired or Destroyed
(5) Refusal or Impounded
(7) Other:
12. Impact Data Obtained 7
(0) No Data Obtained
(1) CDC Only
(2) Crush Profile Only
(3) Trajectory Data Only
(4) CDC and Crush Profile
(5) CDC and Trajectory
(6) Crush and Trajectory
(7) CDC, Crush, and Trajectory
13. Basis of Delta-V 2
(0) Not Computed (Unknown why)
(1) CRASH - Damage Only
(2) CRASH - Damage + Traj
(3) OLDMISS
(4) POLES
(5) Unknown Basis
(6) One Vehicle Beyond Scope
(7) Collision Beyond Scope
(8) Insufficient Data

VEHICLE HISTORY

14. Prior Impacts for AB Vehicle? 9
(1) Yes
(2) No
(9) Unknown
15. Has Any Prior Maintenance or Service Been Performed on System 2
(1) Yes
(2) No
(9) Unknown

Describe:

AIRBAG VEHICLE

Fleet: NA

VIN: 1G1LT53T9NYXXX

AIRBAG VEHICLE INSPECTION

AIRBAG SUPPLEMENT

2

Mileage: 15901 KM (9881 MILES)

SYSTEM READINESS LAMP

16. Pre-Impact Lamp Condition 1
(1) Functioning/Proved Out
(2) Inoperative
(9) Unknown
17. Driver's Report of Pre-Impact Flashing 99
(00) No Flashing Reported
(01) Continuous Flashing
(02) _____
Number of Flashes: _____
(11) _____
(12) Constant Light
(19) Flashing, Unknown Number
(88) Not Applicable, System Removed
(99) Unknown
18. Period of Pre-Impact Flashing 9
(0) No Flashing
(1) Same Day as Impact
(2) Prior Day
(3) Prior Two Days
(4) Prior Week
(5) Prior Month
(6) Over One Month
(9) Unknown
19. Post-Impact Lamp Condition 9
(1) Functioning/Proved Out
(2) Inoperative
(9) Unknown
20. Post-Impact Flashing 99
(00) No Flashing Reported
(01) Continuous Flashing
(02) _____
Number of Flashes: _____
(11) _____
(12) Constant Light
(19) Flashing, Unknown Number
(88) Not Applicable, System Removed
(99) Unknown
21. Airbag Vehicle First Harmful Event 13
(01) Fire or explosion
(02) Immersion
(03) Gas Inhalation

- (04) Fell from vehicle
(05) Injured in vehicle
(06) Other noncollision (specify):
(07) Overturn
(08) Jackknife
COLLISION WITH:
(09) Pedestrian
(10) Pedalcyclist
(11) Railway train
(12) Animal
(13) Motor vehicle in transport
(same roadway)
(14) Motor vehicle in transport
(other roadway)
(15) Parked motor vehicle
(16) Other type nonmotorist (specify):
(17) Thrown or falling object
(18) Boulder
COLLISION WITH FIXED OBJECT
(20) Building
(21) Impact attenuator/crash cushion
(22) Bridge pier or abutment
(23) Bridge parapet end
(24) Bridge rail
(25) Guardrail
(26) Concrete traffic barrier
(27) Median barrier
(28) Other longitudinal barrier (specify):
(29) Highway/traffic sign post
(30) Overhead sign support
(31) Luminaire/light support
(32) Utility pole
(33) Other post, pole, or support
(34) Culvert
(35) Curb
(36) Ditch
(37) Embankment-earth
(38) Embankment-rock, stone, or concrete
(39) Fence
(40) Wall
(41) Fire hydrant
(42) Shrubbery
(43) Tree
(44) Other fixed object (specify):
(45) Pavement surface irregularity
(99) Unknown

AIRBAG VEHICLE IMPACT SUMMARY

22. Vehicle Role 1
(0) Noncollision

AIRBAG SUPPLEMENT

3

- (1) Striking unit
- (2) Struck unit
- (3) Both striking and struck
- (9) Unknown

23. Manner of Leaving Scene 2
- (1) Driven
 - (2) Towed-due to damage
 - (3) Towed-not for damage
 - (4) Towed-details unknown
 - (5) Abandoned
 - (9) Unknown

24. Number of Impact Events 1
- (8) 8 or more
 - (9) Unknown

25. Rollover φ
- (0) No rollover
 - (1) First event
 - (2) Subsequent event
 - (3) Yes, Unknown event
 - (9) Unknown

26. Override/Underride φ
- (0) No override/underride
 - (1) Override - 1st CDC
 - (2) Override - Other CDC
 - (3) Underride - 1st CDC
 - (4) Underride - Other CDC
 - (9) Unknown

AIRBAG VEHICLE DAMAGE

CODES: (1) Yes, damaged
(2) No damage
(9) Unknown

27. Left Front Fender Damage 1
28. Right Front Fender Damage 2
29. Center Top of Grille Damage 1

FRONT BUMPER E.A. STATUS

30. Left 5

31. Right 5

- (1) Normal
- (2) Extended
- (3) Partial Compression
- (4) Complete Compression
- (5) Not Applicable
- (9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

32. Configuration 4
- (0) Struck Object or Ped
 - (1) Rear-End
 - (2) Head-On
 - (3) Rear-to-Rear
 - (4) Angle
 - (5) Sideswipe-Same Direction
 - (6) Sideswipe-Opposite Dir.
 - (7) Noncollision
 - (8) Nonimpact Deployment
 - (9) Unknown

33. CDC:

34. Object Contacted:

PRIMARY/DEPLOYMENT IMPACT:

35. Event Number 1

36. Total Delta-V 1 mph

37. Longitudinal Delta-V 1 mph

38. Configuration 4
- See 32 above for codes

39. CDC: 12 FDEW 1

40. Object Contacted: V2 1990 MITSUBISHI
ECLIPSE 3-DR

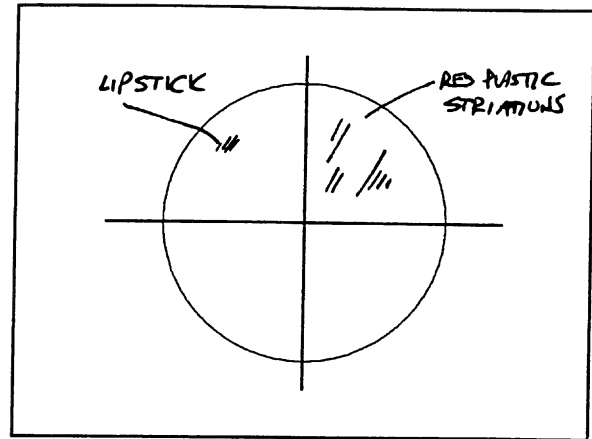
AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged
(2) No, Intact
(3) Not Applicable
(9) Unknown

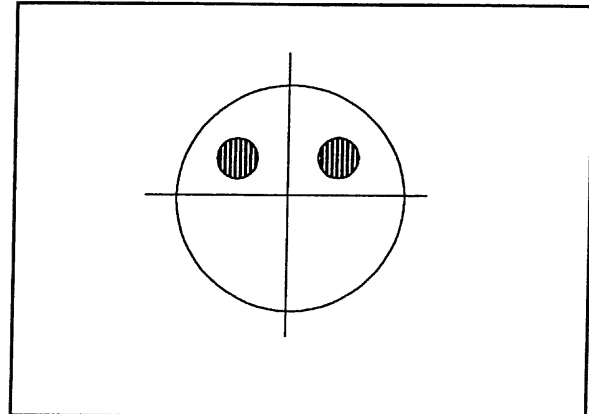
AIRBAG SUPPLEMENT

4

- | | |
|---|--|
| 41. Airbag Module | <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> |
| 42. Left Front Sensor | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 43. Center Front Sensor | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 44. Right Front Sensor | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 45. Rear Cowl Sensor | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 46. Diagnostic Module | <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div> |
| 47. Wiring | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 48. Knee Diverter | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 49. Indication of disconnected or loose electrical connectors | <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> |
| 50. Condition of Deployed Bag | <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> |
| (1) Bag intact
(2) Split or torn
(3) Cut by object in impact
(4) Cut after accident
(5) Other
(8) NA (not deployed)
(9) Unknown | |



BACK



DESCRIBE SYSTEM AND BAG DAMAGE:

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

FRONT

OCCUPANTS OF AIRBAG CAR

AIRBAG SUPPLEMENT

5

51. Number of Occupants in Vehicle

1

52. Number of Injured Persons

1

53. Maximum AIS in Airbag Vehicle

- (0) No Injury
- (1-6) AIS Severity
- (7) Injured, unknown severity
- (9) Unknown

6

DRIVER

Age: 75

Sex: FEMALE

54. Number of Driver Injuries

12

55. Source of Best Injury Data

- (0) Not injured
- (1) Autopsy
- (2) Hospital Medical Records
- (3) Emergency Room only
- (4) Private physician, clinic
- (5) Lay Coroner Report
- (6) EMS Personnel
- (7) Interviewee
- (8) Police
- (9) Unknown

1

MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
--------	---------	---------

Head/Neck/Face	2	
----------------	---	--

MODULE COVER

AIRBAG SUPPLEMENT

6

Chest	<u>0</u>	<u>AIRBAG MODULE</u>
Abdomen	<u> </u>	<u> </u>
Legs/Hips	<u>1</u>	<u>INSTRUMENT PANEL</u>
Other (Arms)	<u> </u>	<u> </u>
Driver Maximum	<u>0</u>	<u>AIRBAG MODULE</u>

EJECTION

Extent: NA

Portal:

OTHER VEHICLE:

Maximum AIS 0

Prime/Deploy Impact w AB Vehicle
Event Number 1

CDC: 10 LPEW 2

Total Delta V 12 KPH / 7.3 MPH

Make: MITSUBISHI

Model Year: 90

Model: ECLIPSE

Body Type: 3-DC

NOTES:

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown

1

Evidence:

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No

2

01 49007

TRAFFIC COLLISION CODING

STATE OF CALIFORNIA		PAGE 2	
DATE OF COLLISION	TIME (2400)	INCIDENT NUMBER	OFFICER I.D. NUMBER
DAY	YEAR	OWNER'S NAME / ADDRESS	
PROPERTY DAMAGE	DESCRIPTION OF DAMAGE		NOTIFIED <input type="checkbox"/> YES <input type="checkbox"/> NO

SEATING POSITION 	OCCUPANTS A - NONE IN VEHICLE B - UNKNOWN C - LAP BELT USED D - LAP BELT NOT USED E - SHOULDER HARNESS USED F - SHOULDER HARNESS NOT USED G - LAP / SHOULDER HARNESS USED H - LAP / SHOULDER HARNESS NOT USED J - PASSIVE RESTRAINT USED K - PASSIVE RESTRAINT NOT USED	SAFETY EQUIPMENT L - AIR BAG DEPLOYED M - AIR BAG NOT DEPLOYED N - OTHER P - NOT REQUIRED CHILD RESTRAINT Q - IN VEHICLE USED R - IN VEHICLE NOT USED S - IN VEHICLE USE UNKNOWN T - IN VEHICLE IMPROPER USE U - NONE IN VEHICLE	M/C BICYCLE - HELMET DRIVER V - NO W - YES PASSENGER X - NO Y - YES	EJECTED FROM VEHICLE 0 - NOT EJECTED 1 - FULLY EJECTED 2 - PARTIALLY EJECTED 3 - UNKNOWN
-----------------------------	--	--	--	---

ITEMS MARKED BELOW FOLLOWED BY AN ASTERISK (*) SHOULD BE EXPLAINED IN THE NARRATIVE.

PRIMARY COLLISION FACTOR NUMBER (#) OF PARTY AT FAULT		TRAFFIC CONTROL DEVICES			TYPE OF VEHICLE			MOVEMENT PRECEDING COLLISION		
1	2	1	2	3	1	2	3	1	2	3
A VC SECTION VIOLATED: <input type="checkbox"/> CITED <input type="checkbox"/> YES <input type="checkbox"/> NO		A CONTROLS FUNCTIONING			A PASSENGER CAR / STATION WAGON			A STOPPED		
B OTHER IMPROPER DRIVING *		B CONTROLS NOT FUNCTIONING *			B PASSENGER CAR W / TRAILER			B PROCEEDING STRAIGHT		
C OTHER THAN DRIVER *		C CONTROLS OBSCURED			C MOTORCYCLE / SCOOTER			C RAN OFF ROAD		
D UNKNOWN *		D NO CONTROLS PRESENT / FACTOR *			D PICKUP OR PANEL TRUCK			D MAKING RIGHT TURN		
E FELL ASLEEP *		TYPE OF COLLISION			E PICKUP / PANEL TRUCK W / TRAILER			E MAKING LEFT TURN		
F WEATHER (MARK 1 TO 2 ITEMS)		A HEAD - ON			F TRUCK OR TRUCK TRACTOR			F MAKING U TURN		
G CLEAR		B SIDESWIPE			G TRUCK / TRUCK TRACTOR W / TRLR.			G BACKING		
H CLOUDY		C REAR END			H SCHOOL BUS			H SLOWING / STOPPING		
I RAINING		D BROADSIDE			I OTHER BUS			I PASSING OTHER VEHICLE		
J SNOWING		E HT OBJECT			J EMERGENCY VEHICLE			J CHANGING LANES		
K FOG / VISIBILITY FT.		F OVERTURNED			K HIGHWAY CONST. EQUIPMENT			K PARKING MANEUVER		
L OTHER **		G VEHICLE / PEDESTRIAN			L BICYCLE			L ENTERING TRAFFIC		
M NO		H OTHER **			M OTHER VEHICLE			M OTHER UNSAFE TURNING		
N LIGHTING		A NON - COLLISION			N PEDESTRIAN			N XING INTO OPPOSING LANE		
O DAYLIGHT		B PEDESTRIAN			O MOPED			O PARKED		
P DUSK - DAWN		C OTHER MOTOR VEHICLE						P MERGING		
Q DARK - STREET LIGHTS		D MOTOR VEHICLE ON OTHER ROADWAY			OTHER ASSOCIATED FACTOR(S) (MARK 1 TO 2 ITEMS)			Q TRAVELING WRONG WAY		
R DARK - NO STREET LIGHTS		E PARKED MOTOR VEHICLE						R OTHER **		
S DARK - STREET LIGHTS NOT FUNCTIONING *		F TRAIN								
T ROADWAY SURFACE		G BICYCLE								
U DRY		H ANIMAL:								
V WET		I FIXED OBJECT:								
W CLOUDY - ICY		J OTHER OBJECT:								
X SLIPPERY (MUDDY, OILY, ETC.)										
Y ROADWAY CONDITION(S) (MARK 1 TO 2 ITEMS)										
Z PAVEMENT, DEEP RUT *		PEDESTRIAN'S INVOLVED								
AA LOOSE MATERIAL ON ROADWAY *		A NO PEDESTRIAN INVOLVED								
AB OBSTRUCTION ON ROADWAY *		B CROSSING IN CROSSWALK AT INTERSECTION								
AC OBSTRUCTION - REPAIR ZONE		C CROSSING IN CROSSWALK - NOT AT INTERSECTION								
AD REDUCED ROADWAY WIDTH		D CROSSING - NOT IN CROSSWALK								
AE FLOODED *		E IN ROAD - INCLUDES SHOULDER								
AF OTHER **		F NOT IN ROAD								
AG UNUSUAL CONDITIONS		G APPROACHING / LEAVING SCHOOL BUS								
AH										



MISCELLANEOUS

HAZARDOUS MATERIAL

SPECIAL INFORMATION

I SLEEPY / FATIGUED

H NOT APPLICABLE

G IMPAIRMENT NOT KNOWN

F IMPAIRMENT - PHYSICAL *

E UNDER DRUG INFLUENCE *

D HBD - IMPAIRMENT UNKNOWN *

C HBD - NOT UNDER INFLUENCE *

B HBD - UNDER INFLUENCE

A HAD NOT BEEN DRINKING

NAME OF COLLISION		TIME (24HR)	MISC NUMBER		OFFICER I.D.														
VICTIM TYPE	PASSENGER ONLY	AGE	SEX	EXTENT OF INJURY ("X" ONE)				INJURED WAS ("X" ONE)					PARTY NUMBER	SEAT POS.	SAFETY EQUIP.	EJECTED			
				FATAL INJURY	SEVERE INJURY	OTHER VISIBLE INJURY	COMPLAINT OF PAIN	DRIVER	PASS.	PED.	BICYCLIST	OTHER							
<input type="checkbox"/>	<input type="checkbox"/>	49	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1	J-C	0		
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: REFUSED TAKEN TO:

DESCRIBE INJURIES
PAIN IN RIGHT HIP AREA

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/>	<input type="checkbox"/>	74	F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	1	K-G	0		
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO: HOSPITAL

DESCRIBE INJURIES
CHEST TRAUMA, HEART ATTACK

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

															<input type="checkbox"/> VICTIM OF VIOLENT CRIME NOTIFIED				
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NAME / D.O.B. / ADDRESS																		TELEPHONE	

(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

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(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

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(INJURED ONLY) TRANSPORTED BY: TAKEN TO:

DESCRIBE INJURIES

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REPORTER'S NAME	I.D. NUMBER		MO.	DAY	YEAR	REVIEWER'S NAME		MO.	DAY	YEAR							

Narrative/Supplemental

Page 4

Date	Time	NCIC Code	By Mansell
(X) Narrative	(X) Collision report	() BA Update	(X) Fatal
() Supplemental	() other	() Haz Mat	() Bus
		() Hit Run	() Other

Location: _____ State Hwy. () Yes (X) No

SCENE

I RECEIVED THE CALL AT 1503 HRS AND RESPONDED FROM THE AREA OF
 I ARRIVED AT THE LOCATION AT . UPON MY ARRIVAL I SAW THAT
 THERE WAS ONE FEMALE SUBJECT (LATER IDENTIFIED AS P#2) ON THE STREET AND THAT
 SHE WAS BEING GIVEN FULL CPR BY THE FIRE/PARAMEDICS. I SAW THAT VEHICLE #1
 OF ----- WAS STOPPED FACING EASTBOUND IN THE #1 WESTBOUND LANE
 AND THAT VEHICLE #2 ----- WAS
 STOPPED FACING WESTBOUND PARTIALLY IN THE #2 LANE AND PART IN THE #1 LANE.

DRIVERS STATEMENTS

PARTY #1: : SAID THAT SHE WAS SOUTHBOUND ON APPROACHING
 SHE STOPPED AT THE STOP SIGN ON . AFTER STOPPING
 SHE LOOKED TO HER LEFT AND THEN TO HER RIGHT AND UPON SEEING NO CROSS TRAFFIC
 SHE STARTED TO CROSS INTENDING TO GO EASTBOUND ON ' SHE SAID THAT
 SHE DIDN'T SEE PARTY #2 UNTIL THE VEHICLE HIT HER CAR.

PARTY #1 TOLD ME THAT SHE WAS COMING FROM HOME AND WAS GOING TO A SUPERMARKET
 ON . SHE WAS IN NO HURRY AND WAS FULLY ATTENTIVE TO HER
 DRIVING. SHE SAID THAT SHE HAD SIX AND HALF HOURS OF SLEEP THAT MORNING GETTING
 UP AT 6:30 AM. SHE HAS NO EXISTING MEDICAL CONDITIONS AND THAT SHE WAS TAKING
 NO MEDICINES OF ANY KIND.

IN TALKING TO PARTY #1 SHE WAS FULLY ALERT AND WAS AWARE OF HER SURROUNDINGS. I
 DID NOT NOTICE ANY SYMPTOMS OF ALCOHOL USE NOR ANY OTHER SYMPTOMS OF REDUCED
 MENTAL STATE. SHE DID COMPLAIN OF A SORE RIGHT HIP WHICH SHE ATTRIBUTED TO
 THE EMERGENCY BRAKE IN THE CENTER CONSOLE OF HER VEHICLE.

PARTY #2: NONE AS THE DRIVER WAS UNDER FULL CARDIAC ARREST.

APPROVED: _____

041 - 15 ONE LION

Page 3 (Rev. 7-87) OPI 042

INCIDENT / OCCURRENCE		TIME (2400)	NO. NUMBER	OFFICER I.D.	NUMBER
ONE	TWO	TYPE SUPPLEMENTAL (X) APPLICABLE			
<input type="checkbox"/> NARRATIVE	<input type="checkbox"/> COLLISION REPORT	<input type="checkbox"/> SA UPDATE	<input type="checkbox"/> FATAL	<input type="checkbox"/> HIT & RUN UPDATE	
<input type="checkbox"/> SUPPLEMENTAL	<input type="checkbox"/> OTHER:	<input type="checkbox"/> HAZARDOUS MATERIALS	<input type="checkbox"/> SCHOOL BUS	<input type="checkbox"/> OTHER:	

CITY / JUDICIAL DISTRICT	REPORTING DISTRICT / BEAT	CITATION NUMBER
LOCATION / SUBJECT		STATE HIGHWAY RELATED <input type="checkbox"/> YES <input type="checkbox"/> NO

1. W1 WAS INTERVIEWED AT THE COLLISION SCENE. W1
2. SAID HE WAS DRIVING W/B ON _____ IN THE #2 LANE
3. /0 P2 WAS W/B ON _____ IN
THE #2 LANE ABOUT THREE CAR LENGTHS AHEAD OF W1.
BOTH W1 AND P2 WERE TRAVELING AT AN APPROXIMATE
SPEED OF 47 MPH. P1 ATTEMPTED TO DRIVE S/B
ACROSS _____ FROM _____ IN P2'S PATH.
P2 SWERVED TO THE LEFT AND BROADSIDED P1.

W2 WAS INTERVIEWED AT THE COLLISION SCENE. W2
SAID HE (W2) HAD JUST STOPPED AT THE STOP SIGN
/B AT _____ WHEN HE SAW THE
COLLISION OCCUR. P1 HAD BEEN STOPPED AT
THE STOP SIGN S/B _____ AT
AHEAD OF W2. P1 ATTEMPTED TO DRIVE
S/B ACROSS _____ AND WAS BROADSIDED BY A
W/B CAR (P2). P2 APPEARED TO BE TRAVELING
WITHIN THE SPEED LIMIT WHEN THE COLLISION
OCCURRED.

4841

Over \rightarrow

TYPE OF INCIDENT / OCCURRENCE		TIME (2400)	NCIC NUMBER	OFFICER I.D.	NUMBER
TYPE OF ONE <input type="checkbox"/> NARRATIVE <input type="checkbox"/> SUPPLEMENTAL		TYPE OF ONE <input type="checkbox"/> COLLISION REPORT <input type="checkbox"/> OTHER:		TYPE SUPPLEMENTAL (IF APPLICABLE) <input type="checkbox"/> BA UPDATE <input type="checkbox"/> HAZARDOUS MATERIALS <input type="checkbox"/> FATAL <input type="checkbox"/> SCHOOL BUS <input type="checkbox"/> HIT & RUN UPDATE <input type="checkbox"/> OTHER:	

PAGE 8

COUNTY / JUDICIAL DISTRICT	REPORTING DISTRICT / BEAT	CITATION NUMBER
LOCATION / SUBJECT		STATE HIGHWAY RELATED <input type="checkbox"/> YES <input type="checkbox"/> NO

1. L- P1 VEHICLE R/R TIRE SCUFF MARK (UNDER P1 AND
2. P2 VEHICLES).
3. BEGIN SCUFF + 91'0" , 15'3" S/O S.L.
4. MID SCUFF + 100'6" , 18'8" S/O S.L.
5. END SCUFF + 106'9" , 28'3" S/O S.L.
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50.

NAME	DATE	REVIEWER'S NAME	MONTH/DAY/YEAR
------	------	-----------------	----------------

DATE OF COLLISION

40.

1400

NOTE NUMBER

●●●●

NUMBER

PAGE

9

ALL MEASUREMENTS ARE APPROXIMATE AND NOT TO SCALE UNLESS STATED (SCALE -



SKETCH
NOT TO SCALE

1. D. NUMBER

MO. DAY YR.

REVIEWER'S NAME

MO. DAY FR.

FACTUAL DIAGRAM

PAGE 10

DATE OF COLLISION

3000

HEIC NUMBER

OFFI

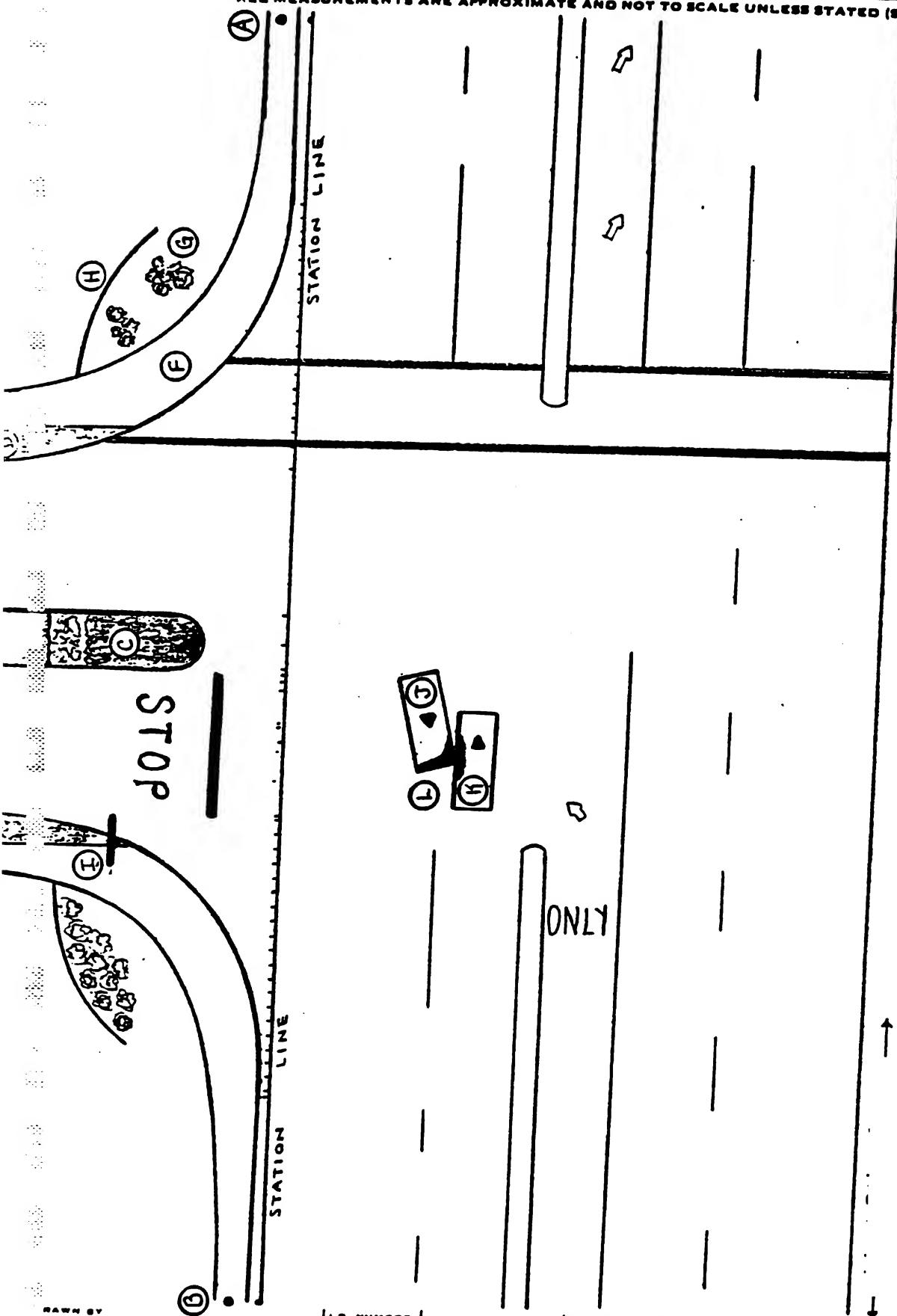
NUMBER

NO.

ALL MEASUREMENTS ARE APPROXIMATE AND NOT TO SCALE UNLESS STATED (SCALE -



INDICATE
NORTH



DRAWN BY

I.D. NUMBER

NO.

DAY

VR.

REVIEWER'S NAME

NO. DAY VR.

Narrative

Page 11

<input checked="" type="checkbox"/> Narrative	<input checked="" type="checkbox"/> Collision report	<input type="checkbox"/> BA Update	<input checked="" type="checkbox"/> Fatal
<input type="checkbox"/> Supplemental	<input type="checkbox"/> other	<input type="checkbox"/> Haz Mat	<input type="checkbox"/> Bus
		<input type="checkbox"/> Hit Run	<input type="checkbox"/> Other

State Hwy. ☐ Yes ☒ NoSCENE INVESTIGATION

DESCRIPTION

This collision occurred on _____ which is an East-West highway which runs through most of the cities in the _____. It is heavily traveled during commuter hours. The center divider of the highway at the W/B lanes is the border of _____. It is located twenty-six miles East of _____. It is a predominantly residential community. The _____ runs East-West through the city. _____ is approximately four miles south of the _____ freeway. _____ is a four lane divided highway. There are raised concrete curbs with gutters and sidewalks on the North side of the highway which is the _____ side of the roadway. The South side of the roadway is bordered by a dirt shoulder and a railroad track approximately thirty feet from the south side of the highway. The location is approximately three miles West of the _____ (a State Hwy.) _____ is a truck route in both directions.

Upon arrival at the scene I saw that the ground was dry. There were two vehicles in contact with one another in the intersection. A red Mitsubishi Eclipse, _____ was stopped facing E/B in the number 1 W/B LOT. A red Chevrolet Corsica _____ was stopped facing S/W in the number 1 W/B LOT. There was some evidence of tire brush marks on the roadway surface but no evidence of applied brakes prior to impact. Examination of the Mitsubishi revealed that there was considerable damage to the left side of the vehicle. That vehicle is not equipped with an air bag. Vehicle 2, the red Chevrolet had extensive front end damage. It is equipped with a driver's side air bag which did deploy. There is evidence that the seat belt did lock in place and that there is present some disfigurement of the belt fabric (stretching) which would tend to indicate that it was worn at the time of a severe impact. Refer to photographs of the vehicles taken at the scene by _____

It also appears from the position of the front driver's side seat that the occupant drove the vehicle in a position very close to the steering wheel. The steering wheel is bent forward. There was little other evidence at the scene. See diagram and legend for measurements.

OPINIONS AND CONCLUSIONS

Party 2 was W/B in the number 2 LOT of approaching
..... at approximately 45mph when P-1 (VILLA) who was stopped S/B on
..... began to make a left turn E/B onto after stopping.
P-1 had been stopped for several seconds while waiting for traffic to clear.
P-1 failed to see P-2 in the oncoming car for an unknown reason. P-1 drove
directly into the path of P-2. P-2 swerved slightly to the left crossing
into the number 1 LOT but could not brake in time and struck P-2 broadside.

The impact caused the air bag on P-2's vehicle to deploy. Vehicle 2 did not
sustain passenger compartment crushing. P-2 however did sustain internal
injuries which resulted in her death. refer to "death report".

The Coroner's office advised that the cause of P-2's death was
a laceration to the heart. This might have been caused by the deployment of
the air bag restraint in such close proximity to the driver who was seated very
close to the steering wheel.

P-1 was in violation of VC - Failure to Yield to through traffic
when entering a through highway.

RECOMMENDATIONS

This case will be submitted to the District Attorney's office for review and
consideration of filling charges of 192(c)(1)PC- Vehicular Manslaughter.

Submitted By

Date .. .

Reviewed by .. .

-CORONER

AUTOPSY RECORD

Name of Deceased:

Case No.

RESIDENCE:
CITY:

STATE:

AGE: 75 years

SEX: Female

RACE: Hispanic

PLACE OF DEATH:

Hospital

ORIGINAL RECORDS OF PROSECUTOR
DO NOT REPRODUCE

DATE OF DEATH:

TIME OF DEATH:

CAUSE OF DEATH:

Massive intrathoracic hemorrhage

Due to:

Laceration of heart and ascending aorta

Due to:

Blunt force trauma

OTHER COND.:

Severe coronary arteriosclerosis and atherosclerotic
cardiovascular disease

AUTOPSY DATE:

AUTOPSY TIME:

PLACE OF AUTOPSY:

AUTOPSY ATTENDANCE:

Date D.C. ISSUED:

CLASSIFICATION: Traffic

Senior Pathologist Witness

Autopsy Surgeon

-CORONER

Official Records of the Coroner's Office
DO NOT REMOVE

AUTOPSY RECORD

Page 2

IDENTIFICATION: Seventy-five year old White female. Height, 59 inches. Weight, 128 lbs. Decomposition, absent. Unembalmed. Hair, gray. Rigor, present. Algor, refrigerated. Livor, minimal. Pallor, absent. Nutrition and muscular development, well. Color of the eyes, dark brown. Mouth, dentures on top, edentulous on bottom.

EXTERNAL DESCRIPTION: The body is that of an unembalmed, well developed, well nourished, White female exhibiting female breasts and genitalia. Coroner's tags are present on both big toes. The head appears to be normocephalic with the usual hair distribution. The facial features are unremarkable with no conjunctival hemorrhages. There is abrasion on both sides of the nostrils and brownish abrasion which is yellow, leathery, going from the anterior chin down to the base of the chin area. This is of brownish discoloration, probably because of drying artifact. There is a scar under the left subclavian area of about 2 inches in size, under which there is a pacemaker. Venipuncture needle marks are present, with iodine paint in the epigastric area. Venipuncture needle marks with bruising are on the right antecubital fossa, right wrist, and right inguinal area. An I.V. line with attached fluid bag and armboard is on the left antecubital fossa. There is an old healed surgical scar in the right upper quadrant of the abdomen, and another is in the right paramedian, lower abdomen. An old rectangular shaped scar, 4 x 4 inches in size, in the anterior left shin. A small abrasion is in the left kneecap and medial aspect of the left big toe. Examination of the hand also reveals the presence of a small 1 inch laceration and contusion on the dorsal aspect of the left hand. There is faded nail polish on the fingernails, and a small abrasion of the left forearm. The back is otherwise clear. There is an abrasion of the left side of the cheek area, also. Photographs of the injuries are taken.

PRIMARY INCISION: The body is opened by the usual Y-shaped incision and the anterior chest plate is removed. There is no fracture to the anterior ribcage; however, there is hemorrhage in the anterior chest wall muscle, which is the pectoral muscle, in the upper portion close to the sternoclavicular joint area. Both sides of the chest cavity are filled with a large amount of blood and blood clot. About 1600 cc's of blood and blood clot are removed from the right chest cavity, and about 600 cc's from the left pleural cavity. The pericardial sac has been lacerated on the right side. Photographs are taken. The abdominal organs are in their normal locations, and the serous surfaces appear to be smooth and glistening.

CARDIOVASCULAR SYSTEM: The heart weighs 370 grams. The pericardial sac is lacerated on the right side with laceration of the right atrium and right right atrial appendage. Photographs of the area are taken. The epicardial surface of the heart also shows laceration of about 2 cm. in size with contusion

Autopsy Surgeon

-CORONER

AUTOPSY RECORD

Official Records of the Coroner's Office Page 3

around it. There is also another hemorrhagic area noted in the apex of the heart in the adipose tissue. No direct laceration of the apex is identified. The left and right coronary arteries are in their normal locations with moderate to severe arteriosclerosis and segmental calcification on both sides. At places, the coronary arteries are about 60-70% occluded. The left and right sides of the heart are dilated and have no blood in the cardiac chambers. Blood collected for toxicology is from the right side of the chest cavity. There is contusion and laceration of the interventricular septum and a laceration of the right atrium, and also laceration of the right ventricle, close to the interventricular septum. There is also a laceration of the ascending aorta just above the aortic cusp area, probably leading to massive intrathoracic hemorrhage. Photographs of this are taken. The left ventricular wall is 1.5 cm. in thickness, the right is 0.3 cm. Section of the myocardium reveals a lacerated soft myocardium, especially in the interventricular septum area and the right ventricle. A minimal focal area of scarring is noted on both the interventricular septum and the anterolateral wall of the left ventricle, which appears to be intact. No recent myocardial infarction is seen. The cardiac valves show thickening with calcification of the aortic valve. The rest of the cardiac valves are unremarkable. There is laceration of the right atrial appendage, and the left is intact and unremarkable.

There is aneurysmal dilatation in two places, one in the mid-thoracic area and another in the lower abdominal aorta, before the bifurcation. No rupture of this aneurysm is seen. The rest of the abdominal and thoracic aorta has severe arteriosclerosis with mucosal ulceration and dystrophic calcification.

RESPIRATORY SYSTEM: The left lung weighs 260 grams, the right weighs 200 grams. Both lungs appear to be atelectatic, and are otherwise intact and unremarkable. The pleural surfaces have minimal anthracotic pigmentation. Section of the pulmonary artery is unremarkable, as are the major bronchi. Section of the lung parenchyma reveals atelectatic, congested lungs without any trauma, pneumonia or anomalies.

NECK ORGANS: Mucosa of the larynx, trachea and vocal cords are smooth and glistening, as is the mucosa of the pharynx and esophagus. The tongue shows tongue bites with hemorrhage in the tip of the tongue. Photographs of the area are taken. The soft tissues around the neck are unremarkable.

DIAPHRAGM: The diaphragm shows serous fibrous adhesions, and is otherwise unremarkable.

LIVER: The liver weighs 1470 grams. The capsular surface of the liver shows mild irregularity, and is otherwise unremarkable. The gallbladder is

Autopsy Surgeon

-CORONER

AUTOPSY RECORD

Page 4

Special Records of the
San Francisco Police Office

surgically absent. The vessels in the porta hepatis appear to be unremarkable. Section of the liver parenchyma reveals firm, slightly nodular liver with smooth and glistening surfaces with no cirrhosis or fibrosis.

PANCREAS: The pancreas is normal in size revealing a normal acinar pattern. The pancreatic duct is patent, as is the bile duct, with no fat necrosis or hemorrhage.

SPLEEN: The spleen weighs 110 grams. The capsular surface of the spleen is smooth and glistening. The cut surface reveals a soft, congested spleen.

ENDOCRINE SYSTEM: Both lobes of the thyroid, the pituitary and the adrenals appear to be soft, congested and unremarkable.

GENITOURINARY SYSTEM: The left and right kidneys are 140 grams each. The capsules strip with ease. The cortical surfaces of both kidneys have marked irregularity, nodularity and scarring. The corticomedullary junctions are otherwise well demarcated, but thinned out. The pyramids are unremarkable. The mucosa of the calyces, pelves and ureters appear to be unremarkable. Both the ureters are patent. The urinary bladder contains no urine, and the mucosa is unremarkable. The uterus, cervix, both tubes and ovaries are surgically absent. The vagina vault is unremarkable.

GASTROINTESTINAL SYSTEM: The stomach has a small amount of solid, semisolid gastric contents. Mucosa of the stomach is smooth and glistening with no gastric ulcer, duodenal ulcer or esophageal varices. The mucosa of the small and large bowel is unremarkable. The appendix is surgically absent. There is no other lesion in the bowel.

CENTRAL NERVOUS SYSTEM: The scalp is reflected in the usual fashion with a few petechial hemorrhages on the inner aspect of the scalp. There is no trauma or fracture to the vault of the skull. Both the temporalis muscles are reflected with no contusion or laceration of the muscle. The calvarium is opened by the usual triple-notch incision. The dorsal surface of the brain is smooth and glistening with no evidence for epidural, subdural or subarachnoidal hemorrhage. The brain weighs 1120 grams. Both lobes of the cerebellum and cerebrum are symmetrical. The cerebral peduncles are midline. The vessels in the circle of Willis have mild arteriosclerosis.

Autopsy Surgeon

AUTOPSY RECORD

59/1281k

Official Record

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OFFICE OF THE CORONER

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REPORT OF TOXICOLOGICAL EXAMINATION

INVESTIGATOR:

CASE NUMBER:

NAME OF DECEASED:

Medical Records of the Coroner
DO NOT REPRODUCE

AGE: 75

SEX: Female

SPECIMENS SUBMITTED: Postmortem Blood

BLOOD RECEIVED BY:

FROM:

Replicate samples of postmortem blood were analyzed for ethanol and other common volatiles employing a headspace gas chromatographic method. None were detected.

Samples of postmortem blood were screened for barbiturates, cocaine, methamphetamine, opiates, and related compounds by RIA. None were detected.

Certified to be a true copy of original report
of the [redacted] Coroner's Office.
[redacted] CORONER

Date typed: --

Toxicologist

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What follows is a medical consultant's interpretation of the mechanism of injuries on Case D91-94-AB-22, that of a 75-year-old female with the following injuries:

- 1) abrasions to the nares, chin and left cheek, and tongue laceration
- 2) contusion to the pectoralis muscle on the anterior chest wall
- 3) laceration to the right side of the pericardium
- 4) laceration of the ascending aorta
- 5) contusion to the epicardium and intra-ventricular septum
- 6) laceration of the heart in the right atrial appendage, right ventricle in proximity to the intra-ventricular septum, and the intra-ventricular septum
- 7) small laceration to the back of the left hand and an abrasion to the left upper inner arm.

It appears that this victim died rapidly from exsanguination from cardiac and aortic laceration. These injuries were likely of a compressive-rupture nature rather than a laceration from penetrating rib or sternal ends as there were no fractures to either ribs or sternum. The compression sustained by the aorta and heart could have been secondary to loading from the shoulder component of the belt system, the airbag and its casing, or from impact with the steering wheel hub, or all of the above.

The weight of evidence, I believe, favors a predominant role for the airbag and casing. There is no evidence of seatbelt contusion or abrasion of the skin, and the abrasions to the chin and face and nares are suggestive of contact with the airbag casing and expanding airbag, suggesting victim proximity to the detonating airbag complex. It is not possible to ascertain whether the thoracic injuries were the result of contact with the airbag module cover or the expanding airbag.

It is unlikely that the pacemaker contributed to her injuries, and while her coronary arteries were seen to be partially occluded, this is a normal finding in victims of this age

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Page Two

and not likely to make the heart muscle more susceptible to laceration from external compression.

The kinematics described in your technical report I believe adequately explain the injuries that this victim sustained.

If you have further questions, please don't hesitate to contact me.

Sincerely,